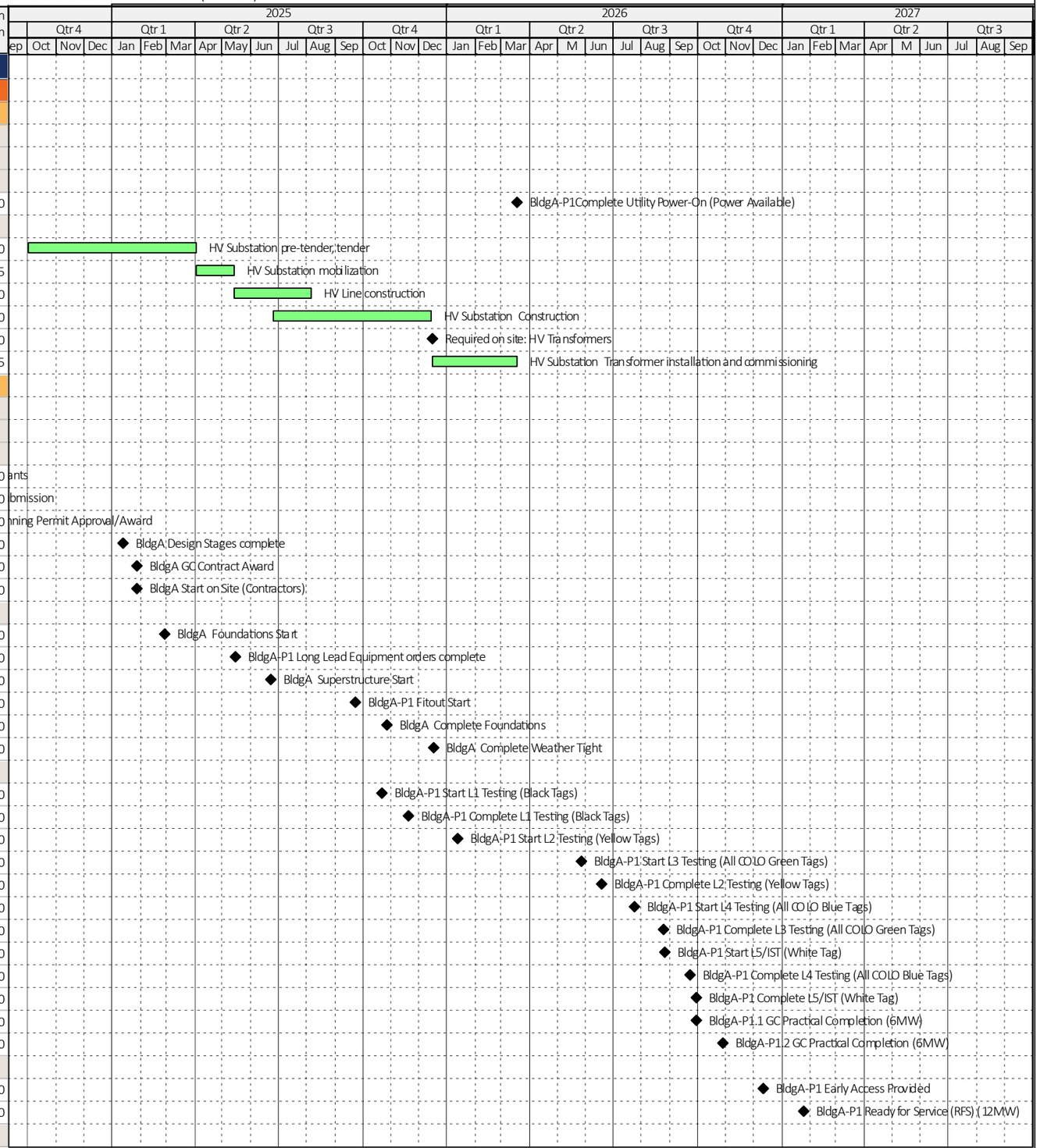
MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
Live- STACK- MIL05 IMS				
Phase 1- 12MW				
Utilities				
Key Milestones				
Landlord				
Site Wide				
MIL05-A-SITE-PC	BldgA-P1Complete Utility Power-On (Power Available)		18-Mar-26	0
Power				
PRO-MIL05A-1580	HV Substation pre-tender, tender	01-Oct-24*	02-Apr-25	120
PRO-MIL05A-1570	HV Substation mobilization	03-Apr-25	13-May-25	25
CSA-MIL05A-1360	HV Line construction	14-May-25	06-Aug-25	60
CSA-MIL05A-1020	HV Substation Construction	26-Jun-25	15-Dec-25	120
FIT-MIL05A-3100	Required on site: HV Transformers	16-Dec-25		0
FIT-MIL05A-3080	HV Substation Transformer installation and commissioning	16-Dec-25	18-Mar-26	55
Building A				
Key Milestones				
Landlord				
Site Wide				
MIL05-A-SITE-AI	BldgA Appointment consultants		01-Apr-24 A	0
MIL05-A-SITE-PL	BldgA Planning Permit Submission	15-Apr-24 A		0
MIL05-A-SITE-PL	BldgA Planning Permit Approval/Award		04-Jul-24 A	0
MIL05-A-SITE-DI	BldgA Design Stages complete		13-Jan-25	0
MIL05-A-SITE-GC	BldgA GC Contract Award		27-Jan-25	0
MIL05-A-SITE-SC	BldgA Start on Site (Contractors)	28-Jan-25		0
Building				
MIL05-A-SITE-FN	BldgA Foundations Start	27-Feb-25		0
MIL05-A-01-LLE	BldgA-P1 Long Lead Equipment orders complete		16-May-25	0
MIL05-A-SITE-SU	BldgA Superstructure Start	23-Jun-25		0
MIL05-A-01-FIT-	BldgA-P1 Fitout Start	23-Sep-25		0
MIL05-A-SITE-FN	BldgA Complete Foundations		27-Oct-25	0
MIL05-A-SITE-DI	BldgA Complete Weather Tight		17-Dec-25	0
Commissioning				
MIL05-A-01-L1C	BldgA-P1 Start L1 Testing (Black Tags)	22-Oct-25		0
MIL05-A-01-L1C	BldgA-P1 Complete L1 Testing (Black Tags)		19-Nov-25	0
MIL05-A-01-L2C	BldgA-P1 Start L2 Testing (Yellow Tags)	12-Jan-26		0
MIL05-A-01-L3C	BldgA-P1 Start L3 Testing (All COLO Green Tags)	27-May-26		0
MIL05-A-01-L2C	BldgA-P1 Complete L2 Testing (Yellow Tags)		18-Jun-26	0
MIL05-A-01-L4C	BldgA-P1 Start L4 Testing (All COLO Blue Tags)	24-Jul-26		0
MIL05-A-01-L3C	BldgA-P1 Complete L3 Testing (All COLO Green Tags)		25-Aug-26	0
MIL05-A-01-L5C	BldgA-P1 Start L5/IST (White Tag)	26-Aug-26		0
MIL05-A-01-L4C	BldgA-P1 Complete L4 Testing (All COLO Blue Tags)		23-Sep-26	0
MIL05-A-01-L5C	BldgA-P1 Complete L5/IST (White Tag)		30-Sep-26	0
MIL05-A-01.1-PC	BldgA-P1.1 GC Practical Completion (6MW)		30-Sep-26	0
MIL05-A-01.2-PC	BldgA-P1.2 GC Practical Completion (6MW)		28-Oct-26	0
Tenant				
MIL05-A-01-EAP-F	BldgA-P1 Early Access Provided		11-Dec-26	0
MIL05-A-01-RFS-F	BldgA-P1 Ready for Service (RFS) (12MW)		25-Jan-27*	0
Preconstruction				


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
BldgA-P1Complete Utility Power-On (Power Available)
HV Substation pre-tender, tender
HV Substation mobilization
HV Line construction
HV Substation Construction
Required on site: HV Transformers
HV Substation Transformer installation and commissioning
ants
bmission
nning Permit Approval/Award
BldgA Design Stages complete
BldgA GC Contract Award
BldgA Start on Site (Contractors)
BldgA Foundations Start
BldgA-P1 Long Lead Equipment orders complete
BldgA Superstructure Start
BldgA-P1 Fitout Start
BldgA Complete Foundations
BldgA Complete Weather Tight
BldgA-P1 Start L1 Testing (Black Tags)
BldgA-P1 Complete L1 Testing (Black Tags)
BldgA-P1 Start L2 Testing (Yellow Tags)
BldgA-P1 Start L3 Testing (All COLO Green Tags)
BldgA-P1 Complete L2 Testing (Yellow Tags)
BldgA-P1 Start L4 Testing (All COLO Blue Tags)
BldgA-P1 Complete L3 Testing (All COLO Green Tags)
BldgA-P1 Start L5/IST (White Tag)
BldgA-P1 Complete L4 Testing (All COLO Blue Tags)
BldgA-P1 Complete L5/IST (White Tag)
BldgA-P1.1 GC Practical Completion (6MW)
BldgA-P1.2 GC Practical Completion (6MW)
BldgA-P1 Early Access Provided
BldgA-P1 Ready for Service (RFS) (12MW)

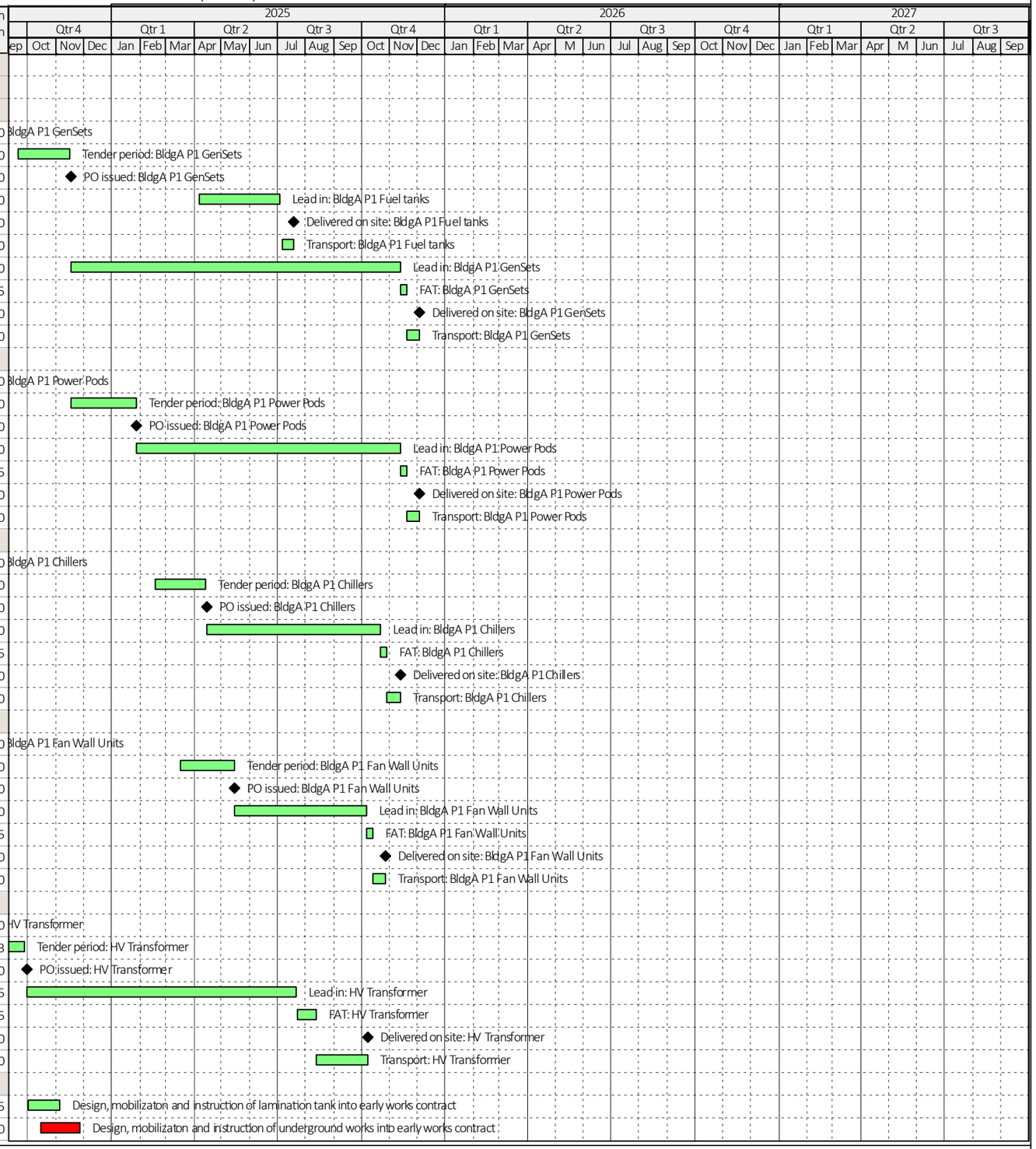
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
Procurement				
Long Lead Equipment				
Generators				
PRO-MIL05A	Design complete: BldgA P1 GenSets	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P1 GenSets	20-Sep-24	15-Nov-24	40
PRO-MIL05A	PO issued: BldgA P1 GenSets	18-Nov-24*		0
PRO-MIL05A	Lead in: BldgA P1 Fuel tanks	07-Apr-25*	04-Jul-25	60
PRO-MIL05A	Delivered on site: BldgA P1 Fuel tanks		18-Jul-25	0
PRO-MIL05A	Transport: BldgA P1 Fuel tanks	07-Jul-25	18-Jul-25	10
PRO-MIL05A	Lead in: BldgA P1 GenSets	18-Nov-24	12-Nov-25	240
PRO-MIL05A	FAT: BldgA P1 GenSets	13-Nov-25	19-Nov-25	5
PRO-MIL05A	Delivered on site: BldgA P1 GenSets		03-Dec-25	0
PRO-MIL05A	Transport: BldgA P1 GenSets	20-Nov-25	03-Dec-25	10
Power Pods				
PRO-MIL05A	Design complete: BldgA P1 Power Pods	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P1 Power Pods	18-Nov-24	27-Jan-25	40
PRO-MIL05A	PO issued: BldgA P1 Power Pods	28-Jan-25*		0
PRO-MIL05A	Lead in: BldgA P1 Power Pods	28-Jan-25	12-Nov-25	200
PRO-MIL05A	FAT: BldgA P1 Power Pods	13-Nov-25	19-Nov-25	5
PRO-MIL05A	Delivered on site: BldgA P1 Power Pods		03-Dec-25	0
PRO-MIL05A	Transport: BldgA P1 Power Pods	20-Nov-25	03-Dec-25	10
Chillers				
PRO-MIL05A	Design complete: BldgA P1 Chillers	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P1 Chillers	18-Feb-25	14-Apr-25	40
PRO-MIL05A	PO issued: BldgA P1 Chillers	15-Apr-25*		0
PRO-MIL05A	Lead in: BldgA P1 Chillers	15-Apr-25	21-Oct-25	130
PRO-MIL05A	FAT: BldgA P1 Chillers	22-Oct-25	28-Oct-25	5
PRO-MIL05A	Delivered on site: BldgA P1 Chillers		12-Nov-25	0
PRO-MIL05A	Transport: BldgA P1 Chillers	29-Oct-25	12-Nov-25	10
Fan Wall Units				
PRO-MIL05A	Design complete: BldgA P1 Fan Wall Units	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P1 Fan Wall Units	17-Mar-25	15-May-25	40
PRO-MIL05A	PO issued: BldgA P1 Fan Wall Units	16-May-25*		0
PRO-MIL05A	Lead in: BldgA P1 Fan Wall Units	16-May-25	06-Oct-25	100
PRO-MIL05A	FAT: BldgA P1 Fan Wall Units	07-Oct-25	13-Oct-25	5
PRO-MIL05A	Delivered on site: BldgA P1 Fan Wall Units		27-Oct-25	0
PRO-MIL05A	Transport: BldgA P1 Fan Wall Units	14-Oct-25	27-Oct-25	10
HV Transformer				
PRO-MIL05A	Design complete: HV Transformer	20-May-24 A		0
PRO-MIL05A	Tender period: HV Transformer	01-Jul-24 A	27-Sep-24	63
PRO-MIL05A	PO issued: HV Transformer	30-Sep-24*		0
PRO-MIL05A	Lead in: HV Transformer	30-Sep-24	22-Jul-25	195
PRO-MIL05A	FAT: HV Transformer	23-Jul-25	12-Aug-25	15
PRO-MIL05A	Delivered on site: HV Transformer		08-Oct-25	0
PRO-MIL05A	Transport: HV Transformer	13-Aug-25	08-Oct-25	40
General Contractor				
PRO-MIL05A-18	Design, mobilizaton and instruction of lamination tank into early works co	01-Oct-24	05-Nov-24	25
PRO-MIL05A-25	Design, mobilizaton and instruction of underground works into early works	15-Oct-24	26-Nov-24	30


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
BldgA P1 GenSets
Tender period: BldgA P1 GenSets
PO issued: BldgA P1 GenSets
Lead in: BldgA P1 Fuel tanks
Delivered on site: BldgA P1 Fuel tanks
Transport: BldgA P1 Fuel tanks
Lead in: BldgA P1 GenSets
FAT: BldgA P1 GenSets
Delivered on site: BldgA P1 GenSets
Transport: BldgA P1 GenSets
BldgA P1 Power Pods
Tender period: BldgA P1 Power Pods
PO issued: BldgA P1 Power Pods
Lead in: BldgA P1 Power Pods
FAT: BldgA P1 Power Pods
Delivered on site: BldgA P1 Power Pods
Transport: BldgA P1 Power Pods
BldgA P1 Chillers
Tender period: BldgA P1 Chillers
PO issued: BldgA P1 Chillers
Lead in: BldgA P1 Chillers
FAT: BldgA P1 Chillers
Delivered on site: BldgA P1 Chillers
Transport: BldgA P1 Chillers
BldgA P1 Fan Wall Units
Tender period: BldgA P1 Fan Wall Units
PO issued: BldgA P1 Fan Wall Units
Lead in: BldgA P1 Fan Wall Units
FAT: BldgA P1 Fan Wall Units
Delivered on site: BldgA P1 Fan Wall Units
Transport: BldgA P1 Fan Wall Units
HV Transformer
Tender period: HV Transformer
PO issued: HV Transformer
Lead in: HV Transformer
FAT: HV Transformer
Delivered on site: HV Transformer
Transport: HV Transformer
Design, mobilizaton and instruction of lamination tank into early works contract
Design, mobilizaton and instruction of underground works into early works contract

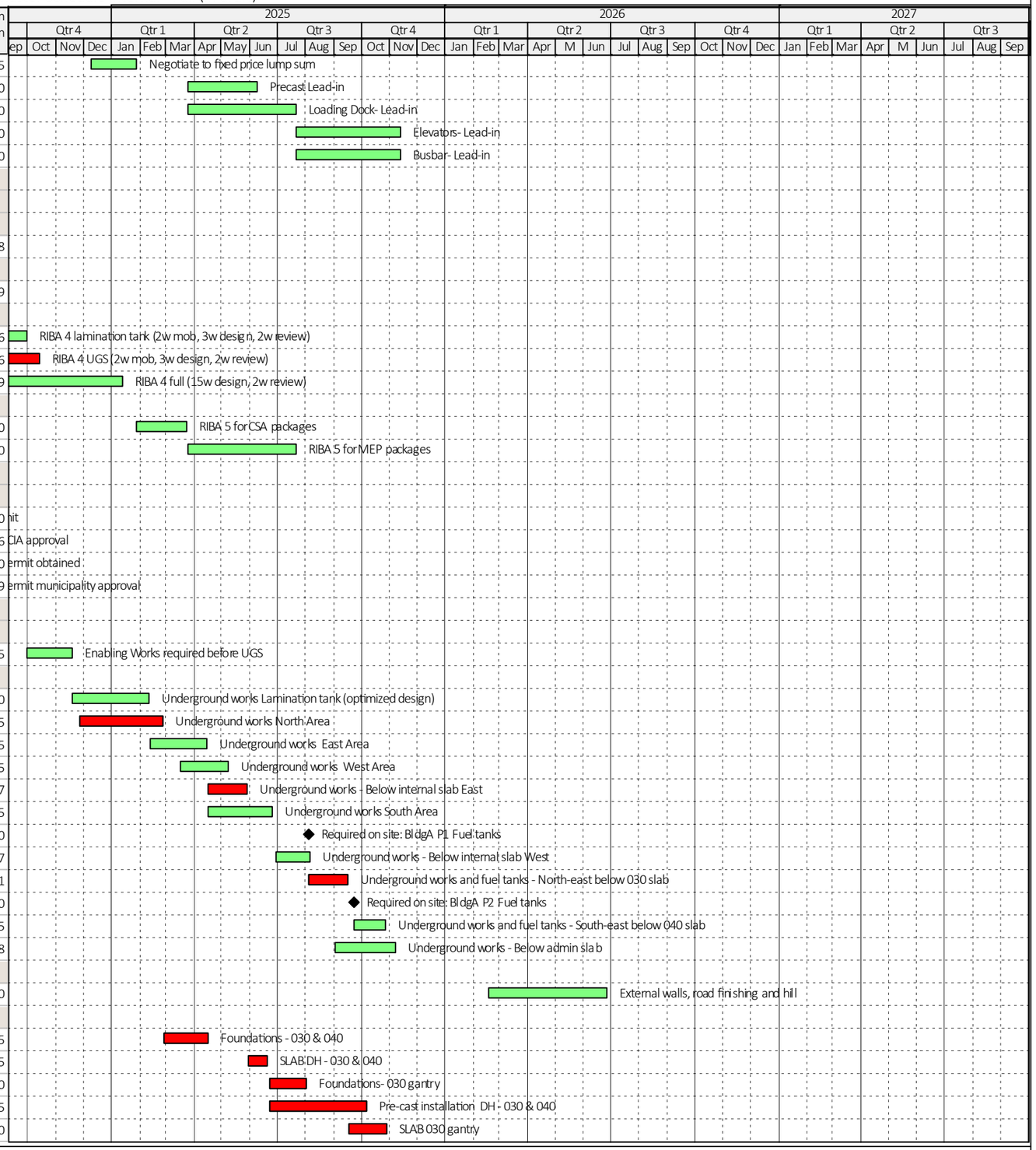
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
PRO-MIL05A-18	Negotiate to fixed price lump sum	09-Dec-24	27-Jan-25	25
PRO-MIL05A-20	Precast Lead-in	25-Mar-25	09-Jun-25	50
PRO-MIL05A-18	Loading Dock- Lead-in	25-Mar-25	21-Jul-25	80
PRO-MIL05A-13	Elevators- Lead-in	22-Jul-25	12-Nov-25	80
PRO-MIL05A-10	Busbar- Lead-in	22-Jul-25	12-Nov-25	80
Design				
RIBA Stages				
RIBA Stage 2				
DES-MIL05A-	RIBA 2	08-Jan-24 A	31-Jan-24 A	18
RIBA Stage 3				
DES-MIL05A-	RIBA 3	05-Feb-24 A	17-May-24 A	69
RIBA Stage 4				
DES-MIL05A-	RIBA 4 lamination tank (2w mob, 3w design, 2w review)	26-Aug-24 A	30-Sep-24	26
DES-MIL05A-	RIBA 4 UGS (2w mob, 3w design, 2w review)	26-Aug-24 A	14-Oct-24	36
DES-MIL05A-	RIBA 4 full (15w design, 2w review)	26-Aug-24 A	13-Jan-25	89
RIBA Stage 5				
DES-MIL05A-	RIBA 5 for CSA packages	28-Jan-25	24-Mar-25	40
DES-MIL05A-	RIBA 5 for MEP packages	25-Mar-25	21-Jul-25	80
Permits				
Building permit				
PER-MIL05A-10:	Submission Building permit	15-Apr-24 A		0
PER-MIL05A-10:	Building permit SCIA approval	15-Apr-24 A	27-May-24 A	26
PER-MIL05A-10:	Building permit obtained		04-Jul-24 A	0
PER-MIL05A-10(	Building permit municipality approval	27-May-24 A	04-Jul-24 A	29
Delivery				
Site Enabling				
CSA-MIL05A-1030	Enabling Works required before UGS	30-Sep-24*	18-Nov-24	35
Underground works				
CSA-MIL05A-1240	Underground works Lamination tank (optimized design)	19-Nov-24	11-Feb-25	50
CSA-MIL05A-1250	Underground works North Area	27-Nov-24	26-Feb-25	55
CSA-MIL05A-1200	Underground works East Area	12-Feb-25	15-Apr-25	45
CSA-MIL05A-1210	Underground works West Area	17-Mar-25	08-May-25	35
CSA-MIL05A-1180	Underground works - Below internal slab East	17-Apr-25	29-May-25	27
CSA-MIL05A-1260	Underground works South Area	17-Apr-25	25-Jun-25	45
CSA-MIL05A-1120	Required on site: BldgA P1 Fuel tanks	04-Aug-25		0
CSA-MIL05A-1190	Underground works - Below internal slab West	30-Jun-25	05-Aug-25	27
CSA-MIL05A-1220	Underground works and fuel tanks - North-east below 030 slab	04-Aug-25	16-Sep-25	31
CSA-MIL05A-1130	Required on site: BldgA P2 Fuel tanks	23-Sep-25		0
CSA-MIL05A-1230	Underground works and fuel tanks - South-east below 040 slab	23-Sep-25	27-Oct-25	25
CSA-MIL05A-1170	Underground works - Below admin slab	02-Sep-25	07-Nov-25	48
Landscaping				
CSA-MIL05A-1040	External walls, road finishing and hill	17-Feb-26	26-Jun-26	90
Shell & Core Construction				
CSA-MIL05A-1050	Foundations - 030 & 040	27-Feb-25	16-Apr-25	35
CSA-MIL05A-1160	SLAB DH - 030 & 040	30-May-25	20-Jun-25	15
CSA-MIL05A-1070	Foundations- 030 gantry	23-Jun-25	01-Aug-25	30
CSA-MIL05A-1100	Pre-cast installation DH - 030 & 040	23-Jun-25	06-Oct-25	75
CSA-MIL05A-1140	SLAB 030 gantry	17-Sep-25	28-Oct-25	30


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
ep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
Negotiate to fixed price lump sum
Precast Lead-in
Loading Dock- Lead-in
Elevators- Lead-in
Busbar- Lead-in
RIBA 4 lamination tank (2w mob, 3w design, 2w review)
RIBA 4 UGS (2w mob, 3w design, 2w review)
RIBA 4 full (15w design, 2w review)
RIBA 5 for CSA packages
RIBA 5 for MEP packages
it
CIA approval
ermit obtained
ermit municipality approval
Enabling Works required before UGS
Underground works Lamination tank (optimized design)
Underground works North Area
Underground works East Area
Underground works West Area
Underground works - Below internal slab East
Underground works South Area
Required on site: BldgA P1 Fuel tanks
Underground works - Below internal slab West
Underground works and fuel tanks - North-east below 030 slab
Required on site: BldgA P2 Fuel tanks
Underground works and fuel tanks - South-east below 040 slab
Underground works - Below admin slab
External walls, road finishing and hill
Foundations - 030 & 040
SLAB DH - 030 & 040
Foundations- 030 gantry
Pre-cast installation DH - 030 & 040
SLAB 030 gantry

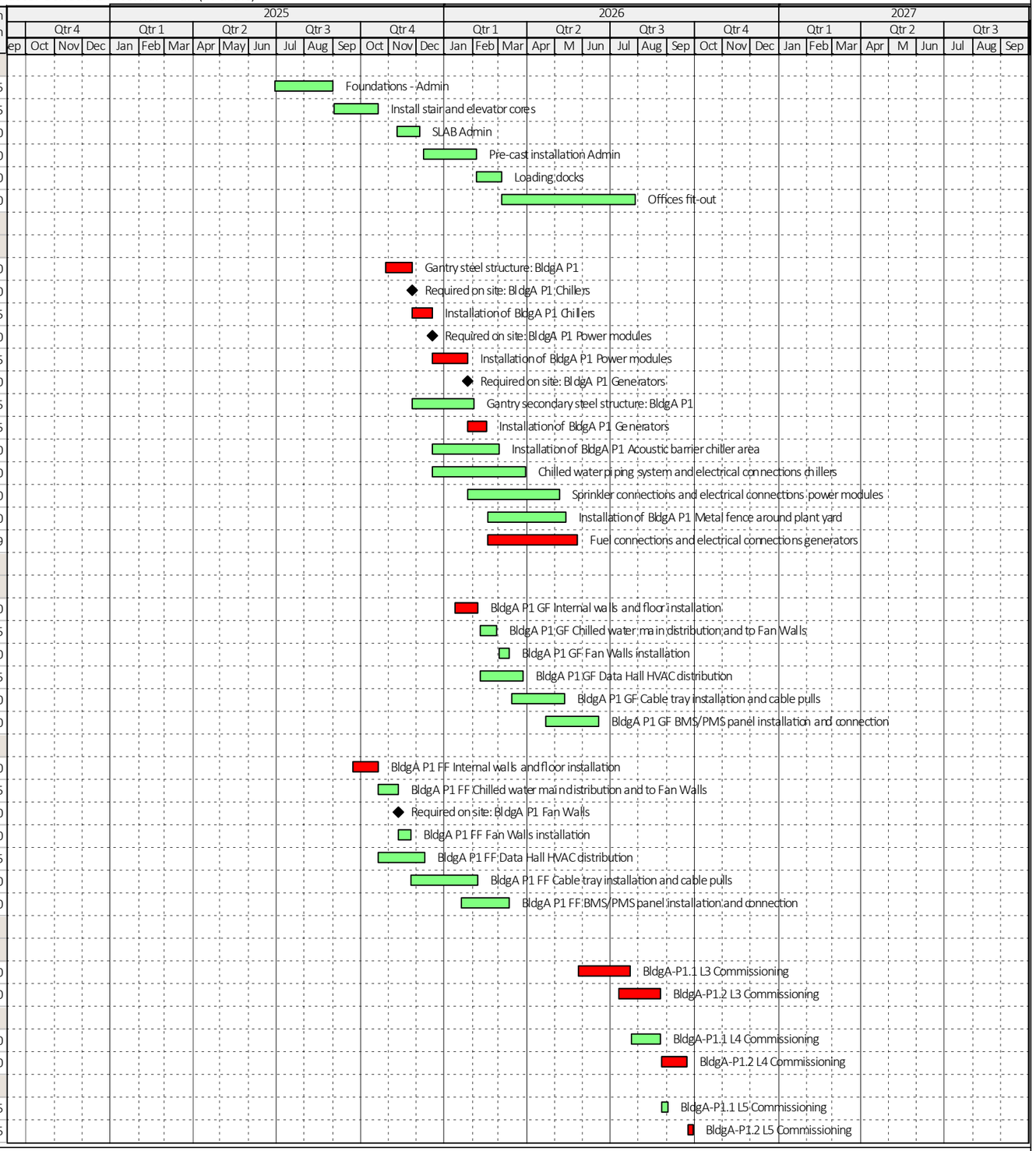
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
Administration Building Fit Out & Commissioning				
CSA-MIL05A-1060	Foundations - Admin	30-Jun-25	01-Sep-25	45
CSA-MIL05A-1080	Install stair and elevator cores	02-Sep-25	20-Oct-25	35
CSA-MIL05A-1150	SLAB Admin	10-Nov-25	05-Dec-25	20
CSA-MIL05A-1110	Pre-cast installation Admin	09-Dec-25	04-Feb-26	30
CSA-MIL05A-1090	Loading docks	05-Feb-26	04-Mar-26	20
FIT-MIL05A-1380	Offices fit-out	05-Mar-26	28-Jul-26	100
Data Hall 030 Fit Out & Commissioning				
Plant Yard				
FIT-MIL05A-186	Gantry steel structure: BldgA P1	29-Oct-25	26-Nov-25	20
FIT-MIL05A-136	Required on site: BldgA P1 Chillers	27-Nov-25		0
FIT-MIL05A-176	Installation of BldgA P1 Chillers	27-Nov-25	18-Dec-25	15
FIT-MIL05A-130	Required on site: BldgA P1 Power modules	19-Dec-25		0
FIT-MIL05A-170	Installation of BldgA P1 Power modules	19-Dec-25	26-Jan-26	15
FIT-MIL05A-132	Required on site: BldgA P1 Generators	27-Jan-26		0
FIT-MIL05A-194	Gantry secondary steel structure: BldgA P1	27-Nov-25	02-Feb-26	35
FIT-MIL05A-174	Installation of BldgA P1 Generators	27-Jan-26	16-Feb-26	15
FIT-MIL05A-178	Installation of BldgA P1 Acoustic barrier chiller area	19-Dec-25	02-Mar-26	40
FIT-MIL05A-210	Chilled water piping system and electrical connections chillers	19-Dec-25	30-Mar-26	60
FIT-MIL05A-104	Sprinkler connections and electrical connections power modules	27-Jan-26	06-May-26	70
FIT-MIL05A-172	Installation of BldgA P1 Metal fence around plant yard	17-Feb-26	13-May-26	60
FIT-MIL05A-202	Fuel connections and electrical connections generators	17-Feb-26	26-May-26	69
Fit Out				
Ground Floor				
FIT-MIL05A-2	BldgA P1 GF Internal walls and floor installation	12-Jan-26	06-Feb-26	20
FIT-MIL05A-2	BldgA P1 GF Chilled water main distribution and to Fan Walls	09-Feb-26	27-Feb-26	15
FIT-MIL05A-2	BldgA P1 GF Fan Walls installation	02-Mar-26	13-Mar-26	10
FIT-MIL05A-2	BldgA P1 GF Data Hall HVAC distribution	09-Feb-26	27-Mar-26	35
FIT-MIL05A-2	BldgA P1 GF Cable tray installation and cable pulls	16-Mar-26	12-May-26	40
FIT-MIL05A-2	BldgA P1 GF BMS/PMS panel installation and connection	21-Apr-26	18-Jun-26	40
First Floor				
FIT-MIL05A-2	BldgA P1 FF Internal walls and floor installation	23-Sep-25	20-Oct-25	20
FIT-MIL05A-2	BldgA P1 FF Chilled water main distribution and to Fan Walls	21-Oct-25	11-Nov-25	15
FIT-MIL05A-2	Required on site: BldgA P1 Fan Walls	12-Nov-25		0
FIT-MIL05A-2	BldgA P1 FF Fan Walls installation	12-Nov-25	25-Nov-25	10
FIT-MIL05A-2	BldgA P1 FF Data Hall HVAC distribution	21-Oct-25	10-Dec-25	35
FIT-MIL05A-2	BldgA P1 FF Cable tray installation and cable pulls	26-Nov-25	06-Feb-26	40
FIT-MIL05A-2	BldgA P1 FF BMS/PMS panel installation and connection	19-Jan-26	13-Mar-26	40
On-Site Commissioning				
Level 3 Cx- Start-Up & Pre-Functional Testing				
CX-MIL05A-1	BldgA-P1.1 L3 Commissioning	27-May-26	23-Jul-26	40
CX-MIL05A-1	BldgA-P1.2 L3 Commissioning	10-Jul-26	25-Aug-26	30
Level 4 Cx- Functional Performance Testing				
CX-MIL05A-1	BldgA-P1.1 L4 Commissioning	24-Jul-26	25-Aug-26	20
CX-MIL05A-1	BldgA-P1.2 L4 Commissioning	26-Aug-26	23-Sep-26	20
Level 5 Cx- Integrated Systems Testing				
CX-MIL05A-1	BldgA-P1.1 L5 Commissioning	26-Aug-26	02-Sep-26	5
CX-MIL05A-1	BldgA-P1.2 L5 Commissioning	24-Sep-26	30-Sep-26	5


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Foundations - Admin
Install stair and elevator cores
SLAB Admin
Pre-cast installation Admin
Loading docks
Offices fit-out
Gantry steel structure: BldgA P1
Required on site: BldgA P1 Chillers
Installation of BldgA P1 Chillers
Required on site: BldgA P1 Power modules
Installation of BldgA P1 Power modules
Required on site: BldgA P1 Generators
Gantry secondary steel structure: BldgA P1
Installation of BldgA P1 Generators
Installation of BldgA P1 Acoustic barrier chiller area
Chilled water piping system and electrical connections chillers
Sprinkler connections and electrical connections power modules
Installation of BldgA P1 Metal fence around plant yard
Fuel connections and electrical connections generators
BldgA P1 GF Internal walls and floor installation
BldgA P1 GF Chilled water main distribution and to Fan Walls
BldgA P1 GF Fan Walls installation
BldgA P1 GF Data Hall HVAC distribution
BldgA P1 GF Cable tray installation and cable pulls
BldgA P1 GF BMS/PMS panel installation and connection
BldgA P1 FF Internal walls and floor installation
BldgA P1 FF Chilled water main distribution and to Fan Walls
Required on site: BldgA P1 Fan Walls
BldgA P1 FF Fan Walls installation
BldgA P1 FF Data Hall HVAC distribution
BldgA P1 FF Cable tray installation and cable pulls
BldgA P1 FF BMS/PMS panel installation and connection
BldgA-P1.1 L3 Commissioning
BldgA-P1.2 L3 Commissioning
BldgA-P1.1 L4 Commissioning
BldgA-P1.2 L4 Commissioning
BldgA-P1.1 L5 Commissioning
BldgA-P1.2 L5 Commissioning

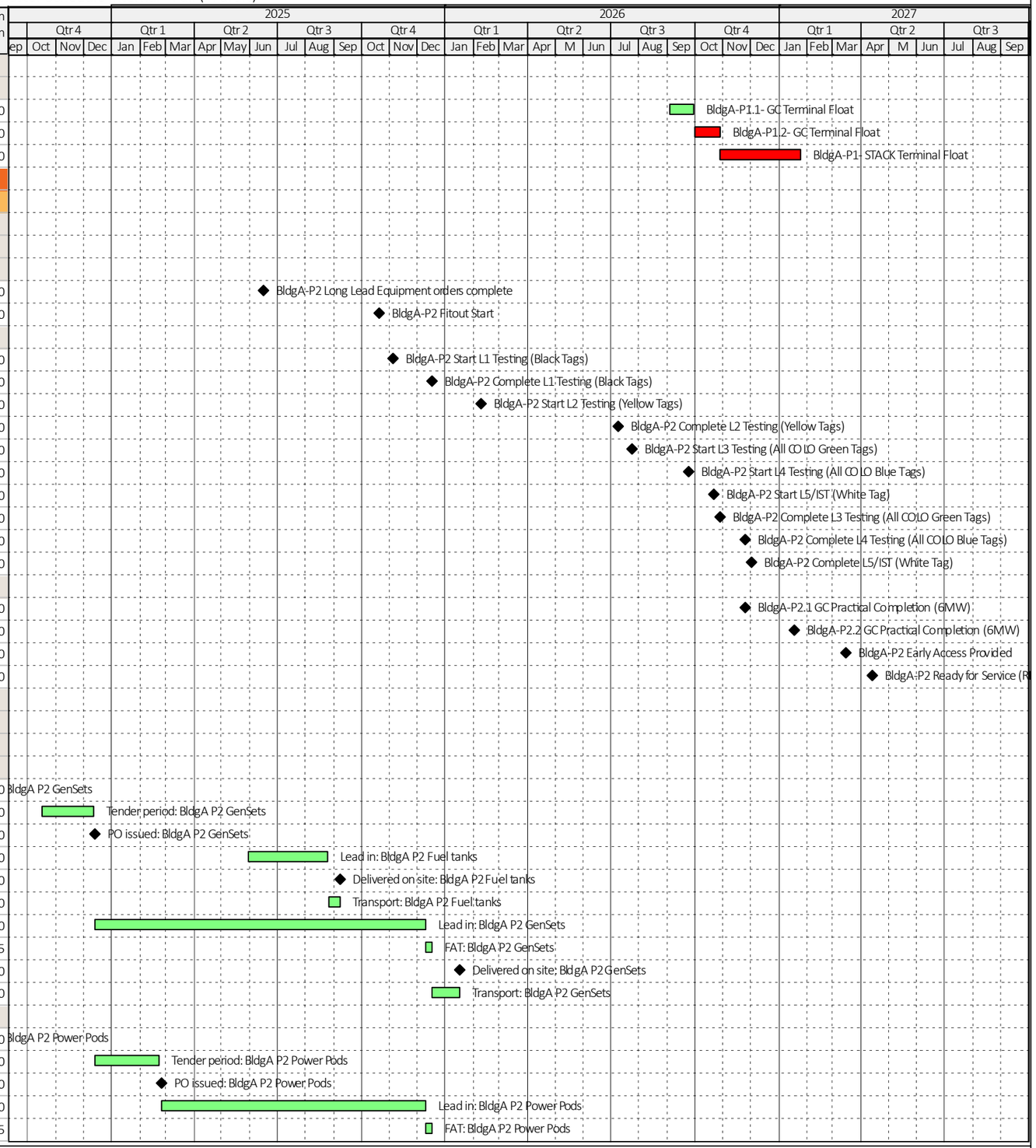
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
	Level 6 Cx- Hand Over			
	Terminal Float			
TER-MILC	BldgA-P1.1- GC Terminal Float	03-Sep-26	30-Sep-26	20
TER-MILC	BldgA-P1.2- GC Terminal Float	01-Oct-26	28-Oct-26	20
TER-MILC	BldgA-P1- STACK Terminal Float	29-Oct-26	25-Jan-27	50
	Phase 2- 12MW			
	Building A			
	Key Milestones			
	Landlord			
	Building			
MIL05-A-02-LLE-	BldgA-P2 Long Lead Equipment orders complete		16-Jun-25	0
MIL05-A-02-FIT-	BldgA-P2 Fitout Start	21-Oct-25		0
	Commissioning			
MIL05-A-02-L1C	BldgA-P2 Start L1 Testing (Black Tags)	05-Nov-25		0
MIL05-A-02-L1C	BldgA-P2 Complete L1 Testing (Black Tags)		17-Dec-25	0
MIL05-A-02-L2C	BldgA-P2 Start L2 Testing (Yellow Tags)	09-Feb-26		0
MIL05-A-02-L2C	BldgA-P2 Complete L2 Testing (Yellow Tags)		09-Jul-26	0
MIL05-A-02-L3C	BldgA-P2 Start L3 Testing (All COLO Green Tags)	24-Jul-26		0
MIL05-A-02-L4C	BldgA-P2 Start L4 Testing (All COLO Blue Tags)	24-Sep-26		0
MIL05-A-02-L5C	BldgA-P2 Start L5/IST (White Tag)	22-Oct-26		0
MIL05-A-02-L3C	BldgA-P2 Complete L3 Testing (All COLO Green Tags)		28-Oct-26	0
MIL05-A-02-L4C	BldgA-P2 Complete L4 Testing (All COLO Blue Tags)		25-Nov-26	0
MIL05-A-02-L5C	BldgA-P2 Complete L5/IST (White Tag)		02-Dec-26	0
	Tenant			
MIL05-A-02.1-PC-F	BldgA-P2.1 GC Practical Completion (6MW)		25-Nov-26	0
MIL05-A-02.2-PC-F	BldgA-P2.2 GC Practical Completion (6MW)		18-Jan-27	0
MIL05-A-02-EAP-F	BldgA-P2 Early Access Provided		15-Mar-27	0
MIL05-A-02-RFS-F	BldgA-P2 Ready for Service (RFS) (12MW)		13-Apr-27*	0
	Preconstruction			
	Procurement			
	Long Lead Equipment			
	Generators			
PRO-MIL05A	Design complete: BldgA P2 GenSets	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P2 GenSets	17-Oct-24	12-Dec-24	40
PRO-MIL05A	PO issued: BldgA P2 GenSets	13-Dec-24*		0
PRO-MIL05A	Lead in: BldgA P2 Fuel tanks	30-May-25*	25-Aug-25	60
PRO-MIL05A	Delivered on site: BldgA P2 Fuel tanks		08-Sep-25	0
PRO-MIL05A	Transport: BldgA P2 Fuel tanks	26-Aug-25	08-Sep-25	10
PRO-MIL05A	Lead in: BldgA P2 GenSets	13-Dec-24	10-Dec-25	240
PRO-MIL05A	FAT: BldgA P2 GenSets	11-Dec-25	17-Dec-25	5
PRO-MIL05A	Delivered on site: BldgA P2 GenSets		16-Jan-26	0
PRO-MIL05A	Transport: BldgA P2 GenSets	18-Dec-25	16-Jan-26	10
	Power Pods			
PRO-MIL05A	Design complete: BldgA P2 Power Pods	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P2 Power Pods	13-Dec-24	21-Feb-25	40
PRO-MIL05A	PO issued: BldgA P2 Power Pods	24-Feb-25*		0
PRO-MIL05A	Lead in: BldgA P2 Power Pods	24-Feb-25	10-Dec-25	200
PRO-MIL05A	FAT: BldgA P2 Power Pods	11-Dec-25	17-Dec-25	5


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
BldgA-P1.1- GC Terminal Float
BldgA-P1.2- GC Terminal Float
BldgA-P1- STACK Terminal Float
BldgA-P2 Long Lead Equipment orders complete
BldgA-P2 Fitout Start
BldgA-P2 Start L1 Testing (Black Tags)
BldgA-P2 Complete L1 Testing (Black Tags)
BldgA-P2 Start L2 Testing (Yellow Tags)
BldgA-P2 Complete L2 Testing (Yellow Tags)
BldgA-P2 Start L3 Testing (All COLO Green Tags)
BldgA-P2 Start L4 Testing (All COLO Blue Tags)
BldgA-P2 Start L5/IST (White Tag)
BldgA-P2 Complete L3 Testing (All COLO Green Tags)
BldgA-P2 Complete L4 Testing (All COLO Blue Tags)
BldgA-P2 Complete L5/IST (White Tag)
BldgA-P2.1 GC Practical Completion (6MW)
BldgA-P2.2 GC Practical Completion (6MW)
BldgA-P2 Early Access Provided
BldgA:P2 Ready for Service (R
BldgA P2 GenSets
Tender period: BldgA P2 GenSets
PO issued: BldgA P2 GenSets
Lead in: BldgA P2 Fuel tanks
Delivered on site: BldgA P2 Fuel tanks
Transport: BldgA P2 Fuel tanks
Lead in: BldgA P2 GenSets
FAT: BldgA P2 GenSets
Delivered on site: BldgA P2 GenSets
Transport: BldgA P2 GenSets
BldgA P2 Power Pods
Tender period: BldgA P2 Power Pods
PO issued: BldgA P2 Power Pods
Lead in: BldgA P2 Power Pods
FAT: BldgA P2 Power Pods

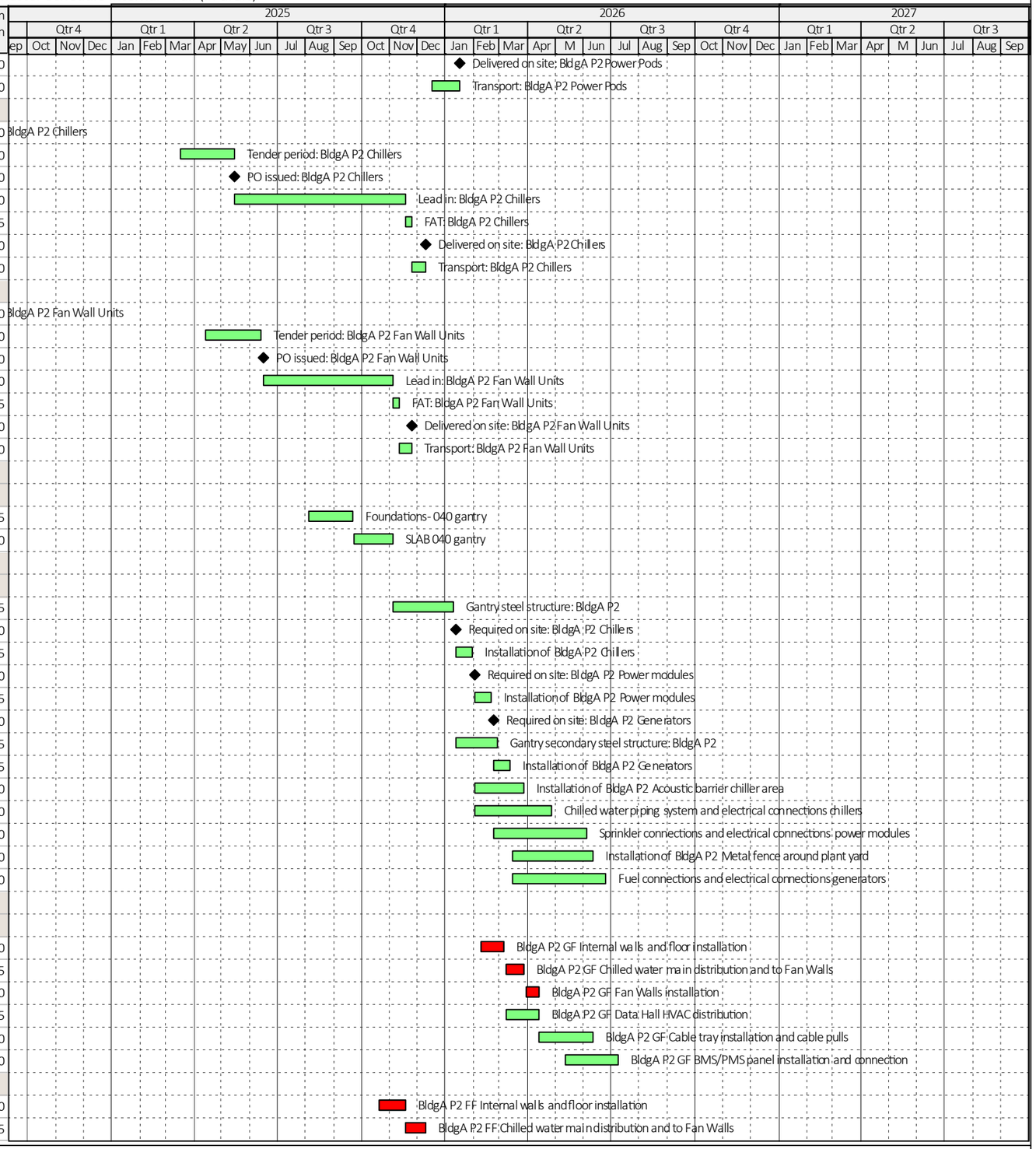
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
PRO-MIL05A	Delivered on site: BldgA P2 Power Pods		16-Jan-26	0
PRO-MIL05A	Transport: BldgA P2 Power Pods	18-Dec-25	16-Jan-26	10
Chillers				
PRO-MIL05A	Design complete: BldgA P2 Chillers	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P2 Chillers	17-Mar-25	15-May-25	40
PRO-MIL05A	PO issued: BldgA P2 Chillers	16-May-25*		0
PRO-MIL05A	Lead in: BldgA P2 Chillers	16-May-25	18-Nov-25	130
PRO-MIL05A	FAT: BldgA P2 Chillers	19-Nov-25	25-Nov-25	5
PRO-MIL05A	Delivered on site: BldgA P2 Chillers		10-Dec-25	0
PRO-MIL05A	Transport: BldgA P2 Chillers	26-Nov-25	10-Dec-25	10
Fan Wall Units				
PRO-MIL05A	Design complete: BldgA P2 Fan Wall Units	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P2 Fan Wall Units	14-Apr-25	13-Jun-25	40
PRO-MIL05A	PO issued: BldgA P2 Fan Wall Units	16-Jun-25*		0
PRO-MIL05A	Lead in: BldgA P2 Fan Wall Units	16-Jun-25	04-Nov-25	100
PRO-MIL05A	FAT: BldgA P2 Fan Wall Units	05-Nov-25	11-Nov-25	5
PRO-MIL05A	Delivered on site: BldgA P2 Fan Wall Units		25-Nov-25	0
PRO-MIL05A	Transport: BldgA P2 Fan Wall Units	12-Nov-25	25-Nov-25	10
Delivery				
Shell & Core Construction				
CSA-MIL05A-1000	Foundations- 040 gantry	04-Aug-25	22-Sep-25	35
CSA-MIL05A-1010	SLAB 040 gantry	23-Sep-25	04-Nov-25	30
Data Hall 040 Fit Out & Commissioning				
Plant Yard				
FIT-MIL05A-184	Gantry steel structure: BldgA P2	05-Nov-25	09-Jan-26	35
FIT-MIL05A-128	Required on site: BldgA P2 Chillers	12-Jan-26		0
FIT-MIL05A-166	Installation of BldgA P2 Chillers	12-Jan-26	30-Jan-26	15
FIT-MIL05A-122	Required on site: BldgA P2 Power modules	02-Feb-26		0
FIT-MIL05A-160	Installation of BldgA P2 Power modules	02-Feb-26	20-Feb-26	15
FIT-MIL05A-124	Required on site: BldgA P2 Generators	23-Feb-26		0
FIT-MIL05A-192	Gantry secondary steel structure: BldgA P2	12-Jan-26	27-Feb-26	35
FIT-MIL05A-164	Installation of BldgA P2 Generators	23-Feb-26	13-Mar-26	15
FIT-MIL05A-168	Installation of BldgA P2 Acoustic barrier chiller area	02-Feb-26	27-Mar-26	40
FIT-MIL05A-208	Chilled water piping system and electrical connections chillers	02-Feb-26	27-Apr-26	60
FIT-MIL05A-102	Sprinkler connections and electrical connections power modules	23-Feb-26	04-Jun-26	70
FIT-MIL05A-162	Installation of BldgA P2 Metal fence around plant yard	16-Mar-26	11-Jun-26	60
FIT-MIL05A-200	Fuel connections and electrical connections generators	16-Mar-26	25-Jun-26	70
Fit Out				
Ground Floor				
FIT-MIL05A-:	BldgA P2 GF Internal walls and floor installation	09-Feb-26	06-Mar-26	20
FIT-MIL05A-:	BldgA P2 GF Chilled water main distribution and to Fan Walls	09-Mar-26	27-Mar-26	15
FIT-MIL05A-:	BldgA P2 GF Fan Walls installation	30-Mar-26	13-Apr-26	10
FIT-MIL05A-:	BldgA P2 GF Data Hall HVAC distribution	09-Mar-26	13-Apr-26	25
FIT-MIL05A-:	BldgA P2 GF Cable tray installation and cable pulls	14-Apr-26	11-Jun-26	40
FIT-MIL05A-:	BldgA P2 GF BMS/PMS panel installation and connection	13-May-26	09-Jul-26	40
First Floor				
FIT-MIL05A-:	BldgA P2 FF Internal walls and floor installation	21-Oct-25	18-Nov-25	20
FIT-MIL05A-:	BldgA P2 FF Chilled water main distribution and to Fan Walls	19-Nov-25	10-Dec-25	15


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
Delivered on site: BldgA P2 Power Pods
Transport: BldgA P2 Power Pods
BldgA P2 Chillers
Tender period: BldgA P2 Chillers
PO issued: BldgA P2 Chillers
Lead in: BldgA P2 Chillers
FAT: BldgA P2 Chillers
Delivered on site: BldgA P2 Chillers
Transport: BldgA P2 Chillers
BldgA P2 Fan Wall Units
Tender period: BldgA P2 Fan Wall Units
PO issued: BldgA P2 Fan Wall Units
Lead in: BldgA P2 Fan Wall Units
FAT: BldgA P2 Fan Wall Units
Delivered on site: BldgA P2 Fan Wall Units
Transport: BldgA P2 Fan Wall Units
Foundations- 040 gantry
SLAB 040 gantry
Gantry steel structure: BldgA P2
Required on site: BldgA P2 Chillers
Installation of BldgA P2 Chillers
Required on site: BldgA P2 Power modules
Installation of BldgA P2 Power modules
Required on site: BldgA P2 Generators
Gantry secondary steel structure: BldgA P2
Installation of BldgA P2 Generators
Installation of BldgA P2 Acoustic barrier chiller area
Chilled water piping system and electrical connections chillers
Sprinkler connections and electrical connections power modules
Installation of BldgA P2 Metal fence around plant yard
Fuel connections and electrical connections generators
BldgA P2 GF Internal walls and floor installation
BldgA P2 GF Chilled water main distribution and to Fan Walls
BldgA P2 GF Fan Walls installation
BldgA P2 GF Data Hall HVAC distribution
BldgA P2 GF Cable tray installation and cable pulls
BldgA P2 GF BMS/PMS panel installation and connection
BldgA P2 FF Internal walls and floor installation
BldgA P2 FF Chilled water main distribution and to Fan Walls

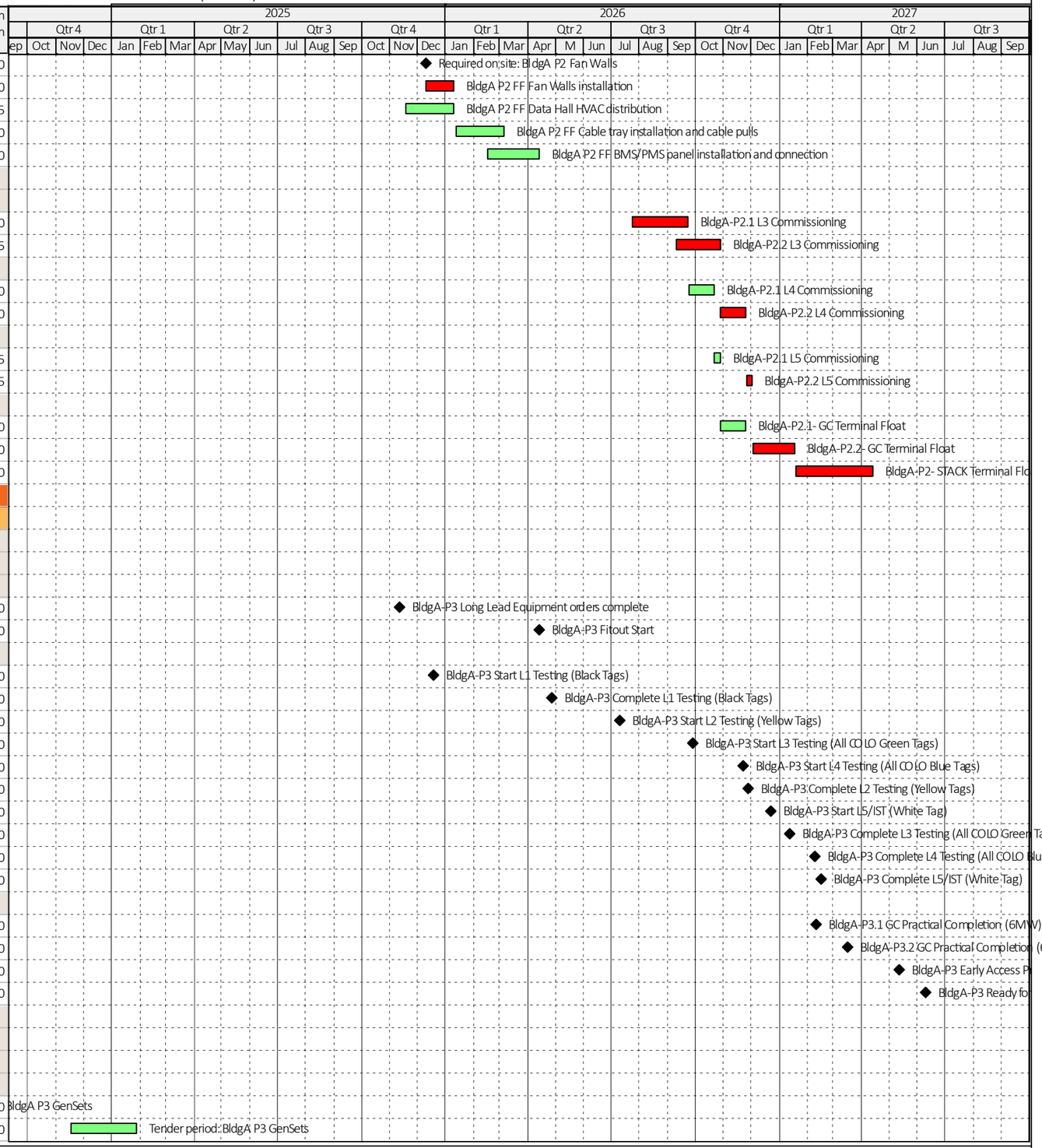
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
FIT-MIL05A-:	Required on site: BldgA P2 Fan Walls	11-Dec-25		0
FIT-MIL05A-:	BldgA P2 FF Fan Walls installation	11-Dec-25	09-Jan-26	10
FIT-MIL05A-:	BldgA P2 FF Data Hall HVAC distribution	19-Nov-25	09-Jan-26	25
FIT-MIL05A-:	BldgA P2 FF Cable tray installation and cable pulls	12-Jan-26	06-Mar-26	40
FIT-MIL05A-:	BldgA P2 FF BMS/PMS panel installation and connection	16-Feb-26	13-Apr-26	40
On-Site Commissioning				
Level 3 Cx- Start-Up & Pre-Functional Testing				
CX-MIL05A-1	BldgA-P2.1 L3 Commissioning	24-Jul-26	23-Sep-26	40
CX-MIL05A-1	BldgA-P2.2 L3 Commissioning	10-Sep-26	28-Oct-26	35
Level 4 Cx- Functional Performance Testing				
CX-MIL05A-1	BldgA-P2.1 L4 Commissioning	24-Sep-26	21-Oct-26	20
CX-MIL05A-1	BldgA-P2.2 L4 Commissioning	29-Oct-26	25-Nov-26	20
Level 5 Cx- Integrated Systems Testing				
CX-MIL05A-1	BldgA-P2.1 L5 Commissioning	22-Oct-26	28-Oct-26	5
CX-MIL05A-1	BldgA-P2.2 L5 Commissioning	26-Nov-26	02-Dec-26	5
Level 6 Cx- Hand Over				
TER-MIL05A-	BldgA-P2.1- GC Terminal Float	29-Oct-26	25-Nov-26	20
TER-MIL05A-	BldgA-P2.2- GC Terminal Float	03-Dec-26	18-Jan-27	20
TER-MIL05A-	BldgA-P2- STACK Terminal Float	19-Jan-27	13-Apr-27	60
Phase 3- 12MW				
Building A				
Key Milestones				
Landlord				
Building				
MIL05-A-03-LLE-	BldgA-P3 Long Lead Equipment orders complete		12-Nov-25	0
MIL05-A-03-FIT-	BldgA-P3 Fitout Start	14-Apr-26		0
Commissioning				
MIL05-A-03-L1C	BldgA-P3 Start L1 Testing (Black Tags)	19-Dec-25		0
MIL05-A-03-L1C	BldgA-P3 Complete L1 Testing (Black Tags)		27-Apr-26	0
MIL05-A-03-L2C	BldgA-P3 Start L2 Testing (Yellow Tags)	10-Jul-26		0
MIL05-A-03-L3C	BldgA-P3 Start L3 Testing (All COLO Green Tags)	28-Sep-26		0
MIL05-A-03-L4C	BldgA-P3 Start L4 Testing (All COLO Blue Tags)	23-Nov-26		0
MIL05-A-03-L2C	BldgA-P3 Complete L2 Testing (Yellow Tags)		27-Nov-26	0
MIL05-A-03-L5C	BldgA-P3 Start L5/IST (White Tag)	23-Dec-26		0
MIL05-A-03-L3C	BldgA-P3 Complete L3 Testing (All COLO Green Tags)		12-Jan-27	0
MIL05-A-03-L4C	BldgA-P3 Complete L4 Testing (All COLO Blue Tags)		09-Feb-27	0
MIL05-A-03-L5C	BldgA-P3 Complete L5/IST (White Tag)		16-Feb-27	0
Tenant				
MIL05-A-03.1-PC-F	BldgA-P3.1 GC Practical Completion (6MW)		10-Feb-27	0
MIL05-A-03.2-PC-F	BldgA-P3.2 GC Practical Completion (6MW)		16-Mar-27	0
MIL05-A-03-EAP-F	BldgA-P3 Early Access Provided		12-May-27	0
MIL05-A-03-RFS-F	BldgA-P3 Ready for Service (RFS) (12MW)		10-Jun-27*	0
Preconstruction				
Procurement				
Long Lead Equipment				
Generators				
PRO-MIL05A	Design complete: BldgA P3 GenSets	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P3 GenSets	18-Nov-24	27-Jan-25	40


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
Required on site: BldgA P2 Fan Walls
BldgA P2 FF Fan Walls installation
BldgA P2 FF Data Hall HVAC distribution
BldgA P2 FF Cable tray installation and cable pulls
BldgA P2 FF BMS/PMS panel installation and connection
BldgA-P2.1 L3 Commissioning
BldgA-P2.2 L3 Commissioning
BldgA-P2.1 L4 Commissioning
BldgA-P2.2 L4 Commissioning
BldgA-P2.1 L5 Commissioning
BldgA-P2.2 L5 Commissioning
BldgA-P2.1- GC Terminal Float
BldgA-P2.2- GC Terminal Float
BldgA-P2- STACK Terminal Flo
BldgA-P3 Long Lead Equipment orders complete
BldgA-P3 Fitout Start
BldgA-P3 Start L1 Testing (Black Tags)
BldgA-P3 Complete L1 Testing (Black Tags)
BldgA-P3 Start L2 Testing (Yellow Tags)
BldgA-P3 Start L3 Testing (All COLO Green Tags)
BldgA-P3 Start L4 Testing (All COLO Blue Tags)
BldgA-P3 Complete L2 Testing (Yellow Tags)
BldgA-P3 Start L5/IST (White Tag)
BldgA-P3 Complete L3 Testing (All COLO Green Tags)
BldgA-P3 Complete L4 Testing (All COLO Blue Tags)
BldgA-P3 Complete L5/IST (White Tag)
BldgA-P3.1 GC Practical Completion (6MW)
BldgA-P3.2 GC Practical Completion (6MW)
BldgA-P3 Early Access P
BldgA-P3 Ready fo
BldgA P3 GenSets
Tender period: BldgA P3 GenSets

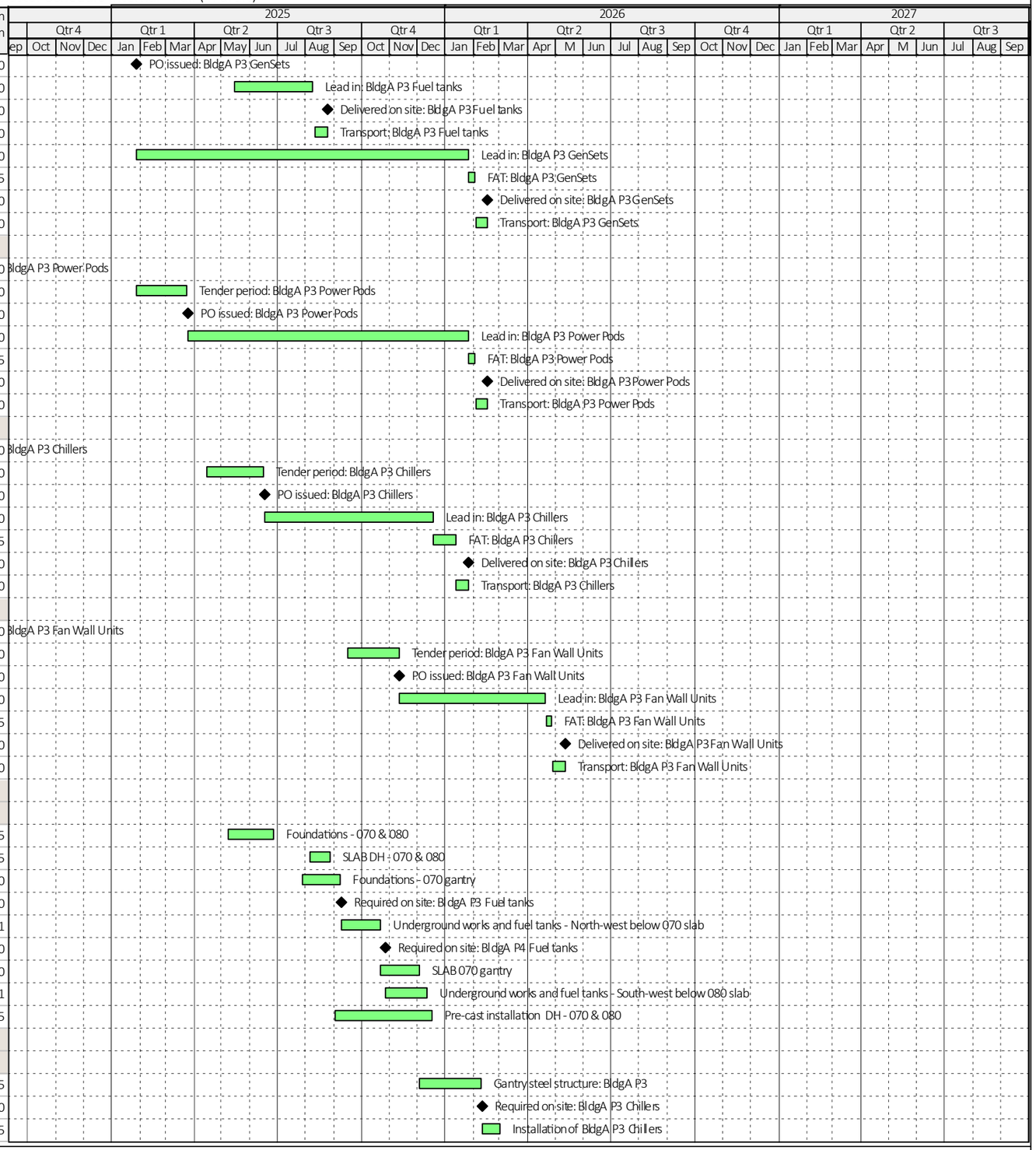
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
PRO-MIL05A	PO issued: BldgA P3 GenSets	28-Jan-25*		0
PRO-MIL05A	Lead in: BldgA P3 Fuel tanks	16-May-25*	08-Aug-25	60
PRO-MIL05A	Delivered on site: BldgA P3 Fuel tanks		25-Aug-25	0
PRO-MIL05A	Transport: BldgA P3 Fuel tanks	11-Aug-25	25-Aug-25	10
PRO-MIL05A	Lead in: BldgA P3 GenSets	28-Jan-25	26-Jan-26	240
PRO-MIL05A	FAT: BldgA P3 GenSets	27-Jan-26	02-Feb-26	5
PRO-MIL05A	Delivered on site: BldgA P3 GenSets		16-Feb-26	0
PRO-MIL05A	Transport: BldgA P3 GenSets	03-Feb-26	16-Feb-26	10
Power Pods				
PRO-MIL05A	Design complete: BldgA P3 Power Pods	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P3 Power Pods	28-Jan-25	24-Mar-25	40
PRO-MIL05A	PO issued: BldgA P3 Power Pods	25-Mar-25*		0
PRO-MIL05A	Lead in: BldgA P3 Power Pods	25-Mar-25	26-Jan-26	200
PRO-MIL05A	FAT: BldgA P3 Power Pods	27-Jan-26	02-Feb-26	5
PRO-MIL05A	Delivered on site: BldgA P3 Power Pods		16-Feb-26	0
PRO-MIL05A	Transport: BldgA P3 Power Pods	03-Feb-26	16-Feb-26	10
Chillers				
PRO-MIL05A	Design complete: BldgA P3 Chillers	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P3 Chillers	15-Apr-25	16-Jun-25	40
PRO-MIL05A	PO issued: BldgA P3 Chillers	17-Jun-25*		0
PRO-MIL05A	Lead in: BldgA P3 Chillers	17-Jun-25	18-Dec-25	130
PRO-MIL05A	FAT: BldgA P3 Chillers	19-Dec-25	12-Jan-26	5
PRO-MIL05A	Delivered on site: BldgA P3 Chillers		26-Jan-26	0
PRO-MIL05A	Transport: BldgA P3 Chillers	13-Jan-26	26-Jan-26	10
Fan Wall Units				
PRO-MIL05A	Design complete: BldgA P3 Fan Wall Units	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P3 Fan Wall Units	16-Sep-25	11-Nov-25	40
PRO-MIL05A	PO issued: BldgA P3 Fan Wall Units	12-Nov-25*		0
PRO-MIL05A	Lead in: BldgA P3 Fan Wall Units	12-Nov-25	20-Apr-26	100
PRO-MIL05A	FAT: BldgA P3 Fan Wall Units	21-Apr-26	27-Apr-26	5
PRO-MIL05A	Delivered on site: BldgA P3 Fan Wall Units		12-May-26	0
PRO-MIL05A	Transport: BldgA P3 Fan Wall Units	28-Apr-26	12-May-26	10
Delivery				
Shell & Core Construction				
CSA-MIL05A-1270	Foundations - 070 & 080	09-May-25	27-Jun-25	35
CSA-MIL05A-1310	SLAB DH - 070 & 080	06-Aug-25	27-Aug-25	15
CSA-MIL05A-1280	Foundations - 070 gantry	28-Jul-25	08-Sep-25	30
PRO-MIL05A-2130	Required on site: BldgA P3 Fuel tanks	09-Sep-25		0
CSA-MIL05A-1320	Underground works and fuel tanks - North-west below 070 slab	09-Sep-25	21-Oct-25	31
PRO-MIL05A-2180	Required on site: BldgA P4 Fuel tanks	28-Oct-25		0
CSA-MIL05A-1300	SLAB 070 gantry	22-Oct-25	03-Dec-25	30
CSA-MIL05A-1330	Underground works and fuel tanks - South-west below 080 slab	28-Oct-25	11-Dec-25	31
CSA-MIL05A-1290	Pre-cast installation DH - 070 & 080	02-Sep-25	17-Dec-25	75
Data Hall 070 Fit Out & Commissioning				
Plant Yard				
FIT-MIL05A-182	Gantry steel structure: BldgA P3	04-Dec-25	09-Feb-26	35
FIT-MIL05A-120	Required on site: BldgA P3 Chillers	10-Feb-26		0
FIT-MIL05A-156	Installation of BldgA P3 Chillers	10-Feb-26	02-Mar-26	15


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
PO issued: BldgA P3 GenSets
Lead in: BldgA P3 Fuel tanks
Delivered on site: BldgA P3 Fuel tanks
Transport: BldgA P3 Fuel tanks
Lead in: BldgA P3 GenSets
FAT: BldgA P3 GenSets
Delivered on site: BldgA P3 GenSets
Transport: BldgA P3 GenSets
BldgA P3 Power Pods
Tender period: BldgA P3 Power Pods
PO issued: BldgA P3 Power Pods
Lead in: BldgA P3 Power Pods
FAT: BldgA P3 Power Pods
Delivered on site: BldgA P3 Power Pods
Transport: BldgA P3 Power Pods
BldgA P3 Chillers
Tender period: BldgA P3 Chillers
PO issued: BldgA P3 Chillers
Lead in: BldgA P3 Chillers
FAT: BldgA P3 Chillers
Delivered on site: BldgA P3 Chillers
Transport: BldgA P3 Chillers
BldgA P3 Fan Wall Units
Tender period: BldgA P3 Fan Wall Units
PO issued: BldgA P3 Fan Wall Units
Lead in: BldgA P3 Fan Wall Units
FAT: BldgA P3 Fan Wall Units
Delivered on site: BldgA P3 Fan Wall Units
Transport: BldgA P3 Fan Wall Units
Foundations - 070 & 080
SLAB DH - 070 & 080
Foundations - 070 gantry
Required on site: BldgA P3 Fuel tanks
Underground works and fuel tanks - North-west below 070 slab
Required on site: BldgA P4 Fuel tanks
SLAB 070 gantry
Underground works and fuel tanks - South-west below 080 slab
Pre-cast installation DH - 070 & 080
Gantry steel structure: BldgA P3
Required on site: BldgA P3 Chillers
Installation of BldgA P3 Chillers

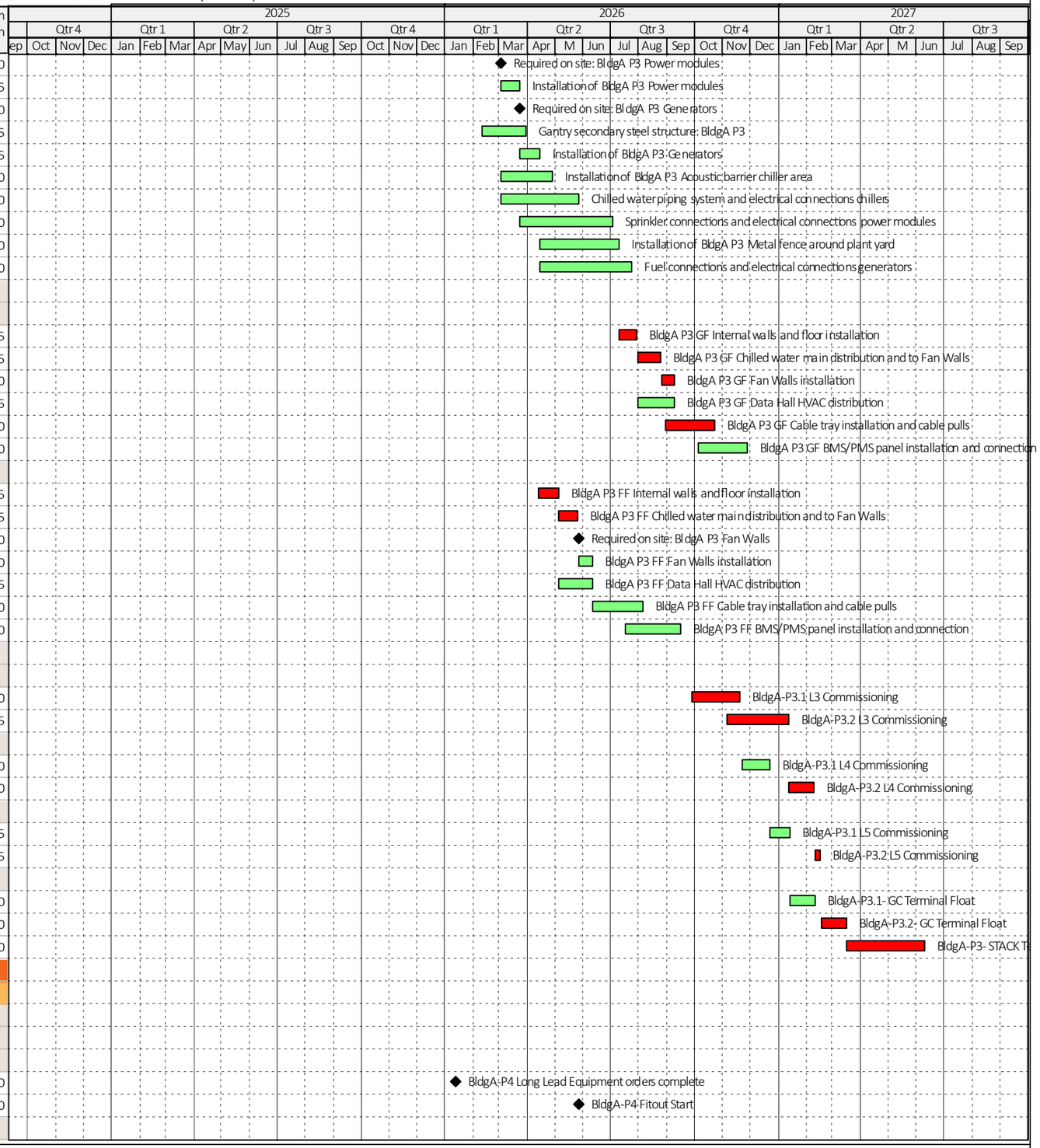
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
FIT-MIL05A-114	Required on site: BldgA P3 Power modules	03-Mar-26		0
FIT-MIL05A-150	Installation of BldgA P3 Power modules	03-Mar-26	23-Mar-26	15
FIT-MIL05A-116	Required on site: BldgA P3 Generators	24-Mar-26		0
FIT-MIL05A-190	Gantry secondary steel structure: BldgA P3	10-Feb-26	30-Mar-26	35
FIT-MIL05A-154	Installation of BldgA P3 Generators	24-Mar-26	14-Apr-26	15
FIT-MIL05A-158	Installation of BldgA P3 Acoustic barrier chiller area	03-Mar-26	28-Apr-26	40
FIT-MIL05A-206	Chilled water piping system and electrical connections chillers	03-Mar-26	27-May-26	60
FIT-MIL05A-100	Sprinkler connections and electrical connections power modules	24-Mar-26	03-Jul-26	70
FIT-MIL05A-152	Installation of BldgA P3 Metal fence around plant yard	15-Apr-26	10-Jul-26	60
FIT-MIL05A-198	Fuel connections and electrical connections generators	15-Apr-26	24-Jul-26	70
Fit Out				
Ground Floor				
FIT-MIL05A-	BldgA P3 GF Internal walls and floor installation	10-Jul-26	30-Jul-26	15
FIT-MIL05A-	BldgA P3 GF Chilled water main distribution and to Fan Walls	31-Jul-26	25-Aug-26	15
FIT-MIL05A-	BldgA P3 GF Fan Walls installation	26-Aug-26	09-Sep-26	10
FIT-MIL05A-	BldgA P3 GF Data Hall HVAC distribution	31-Jul-26	09-Sep-26	25
FIT-MIL05A-	BldgA P3 GF Cable tray installation and cable pulls	31-Aug-26	23-Oct-26	40
FIT-MIL05A-	BldgA P3 GF BMS/PMS panel installation and connection	05-Oct-26	27-Nov-26	40
First Floor				
FIT-MIL05A-	BldgA P3 FF Internal walls and floor installation	14-Apr-26	05-May-26	15
FIT-MIL05A-	BldgA P3 FF Chilled water main distribution and to Fan Walls	06-May-26	26-May-26	15
FIT-MIL05A-	Required on site: BldgA P3 Fan Walls	27-May-26		0
FIT-MIL05A-	BldgA P3 FF Fan Walls installation	27-May-26	11-Jun-26	10
FIT-MIL05A-	BldgA P3 FF Data Hall HVAC distribution	06-May-26	11-Jun-26	25
FIT-MIL05A-	BldgA P3 FF Cable tray installation and cable pulls	12-Jun-26	06-Aug-26	40
FIT-MIL05A-	BldgA P3 FF BMS/PMS panel installation and connection	17-Jul-26	16-Sep-26	40
On-Site Commissioning				
Level 3 Cx- Start-Up & Pre-Functional Testing				
CX-MIL05A-1	BldgA-P3.1 L3 Commissioning	28-Sep-26	20-Nov-26	40
CX-MIL05A-1	BldgA-P3.2 L3 Commissioning	06-Nov-26	12-Jan-27	35
Level 4 Cx- Functional Performance Testing				
CX-MIL05A-1	BldgA-P3.1 L4 Commissioning	23-Nov-26	22-Dec-26	20
CX-MIL05A-1	BldgA-P3.2 L4 Commissioning	13-Jan-27	09-Feb-27	20
Level 5 Cx- Integrated Systems Testing				
CX-MIL05A-1	BldgA-P3.1 L5 Commissioning	23-Dec-26	13-Jan-27	5
CX-MIL05A-1	BldgA-P3.2 L5 Commissioning	10-Feb-27	16-Feb-27	5
Level 6 Cx- Hand Over				
TER-MIL05A-	BldgA-P3.1- GC Terminal Float	14-Jan-27	10-Feb-27	20
TER-MIL05A-	BldgA-P3.2- GC Terminal Float	17-Feb-27	16-Mar-27	20
TER-MIL05A-	BldgA-P3- STACK Terminal Float	17-Mar-27	10-Jun-27	60
Phase 4- 12MW				
Building A				
Key Milestones				
Landlord				
Building				
MIL05-A-04-LLE-	BldgA-P4 Long Lead Equipment orders complete		12-Jan-26	0
MIL05-A-04-FIT-	BldgA-P4 Fitout Start	27-May-26		0
Commissioning				


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
ep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
Required on site: BldgA P3 Power modules
Installation of BldgA P3 Power modules
Required on site: BldgA P3 Generators
Gantry secondary steel structure: BldgA P3
Installation of BldgA P3 Generators
Installation of BldgA P3 Acoustic barrier chiller area
Chilled water piping system and electrical connections chillers
Sprinkler connections and electrical connections power modules
Installation of BldgA P3 Metal fence around plant yard
Fuel connections and electrical connections generators
BldgA P3 GF Internal walls and floor installation
BldgA P3 GF Chilled water main distribution and to Fan Walls
BldgA P3 GF Fan Walls installation
BldgA P3 GF Data Hall HVAC distribution
BldgA P3 GF Cable tray installation and cable pulls
BldgA P3 GF BMS/PMS panel installation and connection
BldgA P3 FF Internal walls and floor installation
BldgA P3 FF Chilled water main distribution and to Fan Walls
Required on site: BldgA P3 Fan Walls
BldgA P3 FF Fan Walls installation
BldgA P3 FF Data Hall HVAC distribution
BldgA P3 FF Cable tray installation and cable pulls
BldgA P3 FF BMS/PMS panel installation and connection
BldgA-P3.1 L3 Commissioning
BldgA-P3.2 L3 Commissioning
BldgA-P3.1 L4 Commissioning
BldgA-P3.2 L4 Commissioning
BldgA-P3.1 L5 Commissioning
BldgA-P3.2 L5 Commissioning
BldgA-P3.1- GC Terminal Float
BldgA-P3.2- GC Terminal Float
BldgA-P4 Long Lead Equipment orders complete
BldgA-P4 Fitout Start

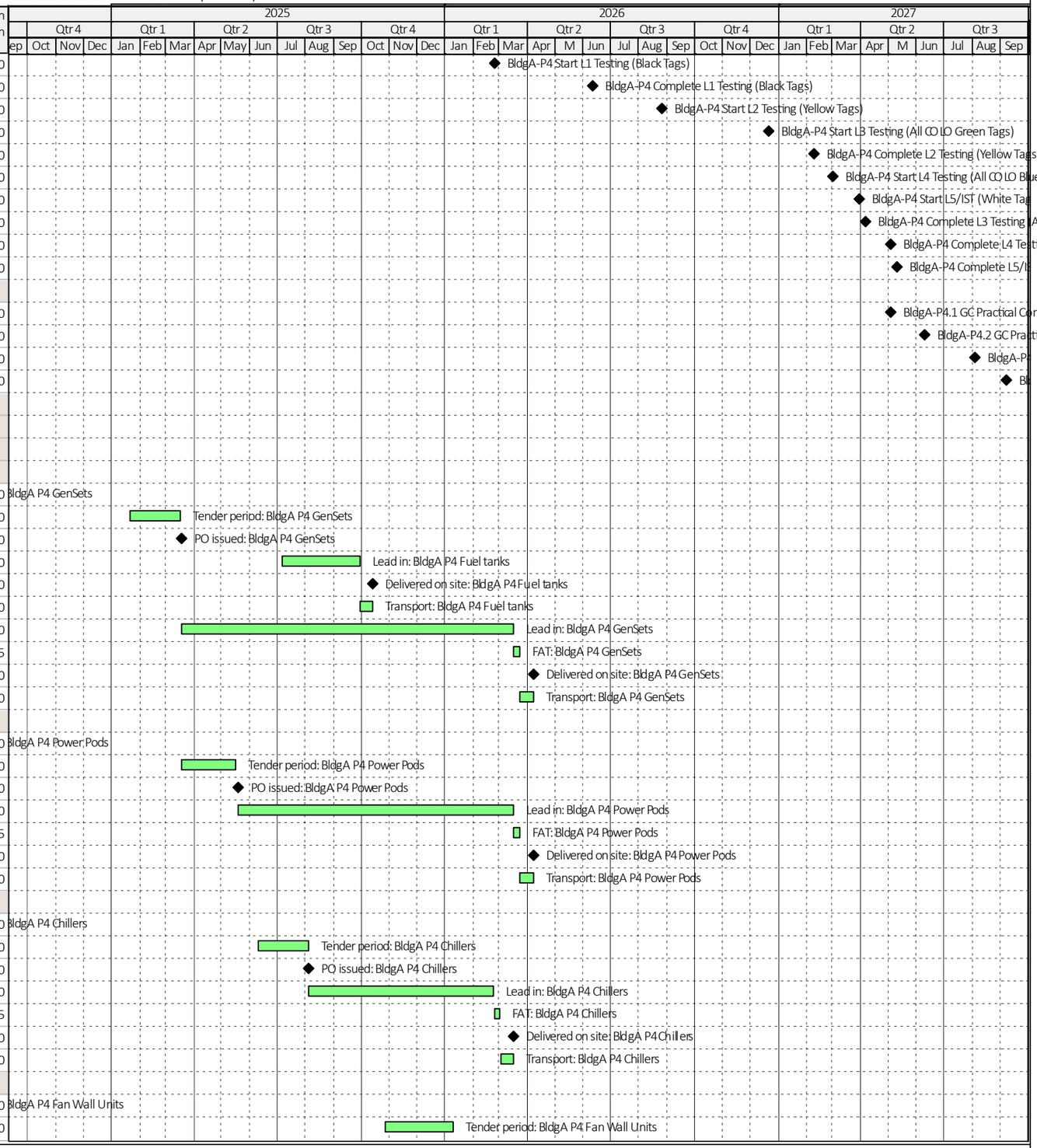
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
MIL05-A-04-L1C	BldgA-P4 Start L1 Testing (Black Tags)	24-Feb-26		0
MIL05-A-04-L1C	BldgA-P4 Complete L1 Testing (Black Tags)		11-Jun-26	0
MIL05-A-04-L2C	BldgA-P4 Start L2 Testing (Yellow Tags)	26-Aug-26		0
MIL05-A-04-L3C	BldgA-P4 Start L3 Testing (All COLO Green Tags)	21-Dec-26		0
MIL05-A-04-L2C	BldgA-P4 Complete L2 Testing (Yellow Tags)		08-Feb-27	0
MIL05-A-04-L4C	BldgA-P4 Start L4 Testing (All COLO Blue Tags)	02-Mar-27		0
MIL05-A-04-L5C	BldgA-P4 Start L5/IST (White Tag)	31-Mar-27		0
MIL05-A-04-L3C	BldgA-P4 Complete L3 Testing (All COLO Green Tags)		06-Apr-27	0
MIL05-A-04-L4C	BldgA-P4 Complete L4 Testing (All COLO Blue Tags)		04-May-27	0
MIL05-A-04-L5C	BldgA-P4 Complete L5/IST (White Tag)		11-May-27	0
Tenant				
MIL05-A-04.1-PC-F	BldgA-P4.1 GC Practical Completion (6MW)		04-May-27	0
MIL05-A-04.2-PC-F	BldgA-P4.2 GC Practical Completion (6MW)		09-Jun-27	0
MIL05-A-04-EAP-F	BldgA-P4 Early Access Provided		04-Aug-27	0
MIL05-B-05-RFS-F	BldgA-P4 Ready for Service (RFS) (12MW)		07-Sep-27*	0
Preconstruction				
Procurement				
Long Lead Equipment				
Generators				
PRO-MIL05A	Design complete: BldgA P4 GenSets	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P4 GenSets	21-Jan-25	17-Mar-25	40
PRO-MIL05A	PO issued: BldgA P4 GenSets	18-Mar-25*		0
PRO-MIL05A	Lead in: BldgA P4 Fuel tanks	07-Jul-25*	29-Sep-25	60
PRO-MIL05A	Delivered on site: BldgA P4 Fuel tanks		13-Oct-25	0
PRO-MIL05A	Transport: BldgA P4 Fuel tanks	30-Sep-25	13-Oct-25	10
PRO-MIL05A	Lead in: BldgA P4 GenSets	18-Mar-25	16-Mar-26	240
PRO-MIL05A	FAT: BldgA P4 GenSets	17-Mar-26	23-Mar-26	5
PRO-MIL05A	Delivered on site: BldgA P4 GenSets		07-Apr-26	0
PRO-MIL05A	Transport: BldgA P4 GenSets	24-Mar-26	07-Apr-26	10
Power Pods				
PRO-MIL05A	Design complete: BldgA P4 Power Pods	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P4 Power Pods	18-Mar-25	16-May-25	40
PRO-MIL05A	PO issued: BldgA P4 Power Pods	19-May-25*		0
PRO-MIL05A	Lead in: BldgA P4 Power Pods	19-May-25	16-Mar-26	200
PRO-MIL05A	FAT: BldgA P4 Power Pods	17-Mar-26	23-Mar-26	5
PRO-MIL05A	Delivered on site: BldgA P4 Power Pods		07-Apr-26	0
PRO-MIL05A	Transport: BldgA P4 Power Pods	24-Mar-26	07-Apr-26	10
Chillers				
PRO-MIL05A	Design complete: BldgA P4 Chillers	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P4 Chillers	10-Jun-25	04-Aug-25	40
PRO-MIL05A	PO issued: BldgA P4 Chillers	05-Aug-25*		0
PRO-MIL05A	Lead in: BldgA P4 Chillers	05-Aug-25	23-Feb-26	130
PRO-MIL05A	FAT: BldgA P4 Chillers	24-Feb-26	02-Mar-26	5
PRO-MIL05A	Delivered on site: BldgA P4 Chillers		16-Mar-26	0
PRO-MIL05A	Transport: BldgA P4 Chillers	03-Mar-26	16-Mar-26	10
Fan Wall Units				
PRO-MIL05A	Design complete: BldgA P4 Fan Wall Units	20-May-24 A		0
PRO-MIL05A	Tender period: BldgA P4 Fan Wall Units	28-Oct-25	09-Jan-26	40


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep
BldgA-P4 Start L1 Testing (Black Tags)
BldgA-P4 Complete L1 Testing (Black Tags)
BldgA-P4 Start L2 Testing (Yellow Tags)
BldgA-P4 Start L3 Testing (All COLO Green Tags)
BldgA-P4 Complete L2 Testing (Yellow Tags)
BldgA-P4 Start L4 Testing (All COLO Blue Tags)
BldgA-P4 Start L5/IST (White Tag
BldgA-P4 Complete L3 Testing (All COLO Gre
BldgA-P4 Complete L4 Testing (All COLO
BldgA-P4 Complete L5/I
BldgA-P4.1 GC Practical Completion (6M
BldgA-P4.2 GC Practical Complet
BldgA-P
BldgA P4 GenSets
Tender period: BldgA P4 GenSets
PO issued: BldgA P4 GenSets
Lead in: BldgA P4 Fuel tanks
Delivered on site: BldgA P4 Fuel tanks
Transport: BldgA P4 Fuel tanks
Lead in: BldgA P4 GenSets
FAT: BldgA P4 GenSets
Delivered on site: BldgA P4 GenSets
Transport: BldgA P4 GenSets
BldgA P4 Power Pods
Tender period: BldgA P4 Power Pods
PO issued: BldgA P4 Power Pods
Lead in: BldgA P4 Power Pods
FAT: BldgA P4 Power Pods
Delivered on site: BldgA P4 Power Pods
Transport: BldgA P4 Power Pods
BldgA P4 Chillers
Tender period: BldgA P4 Chillers
PO issued: BldgA P4 Chillers
Lead in: BldgA P4 Chillers
FAT: BldgA P4 Chillers
Delivered on site: BldgA P4 Chillers
Transport: BldgA P4 Chillers
BldgA P4 Fan Wall Units
Tender period: BldgA P4 Fan Wall Units

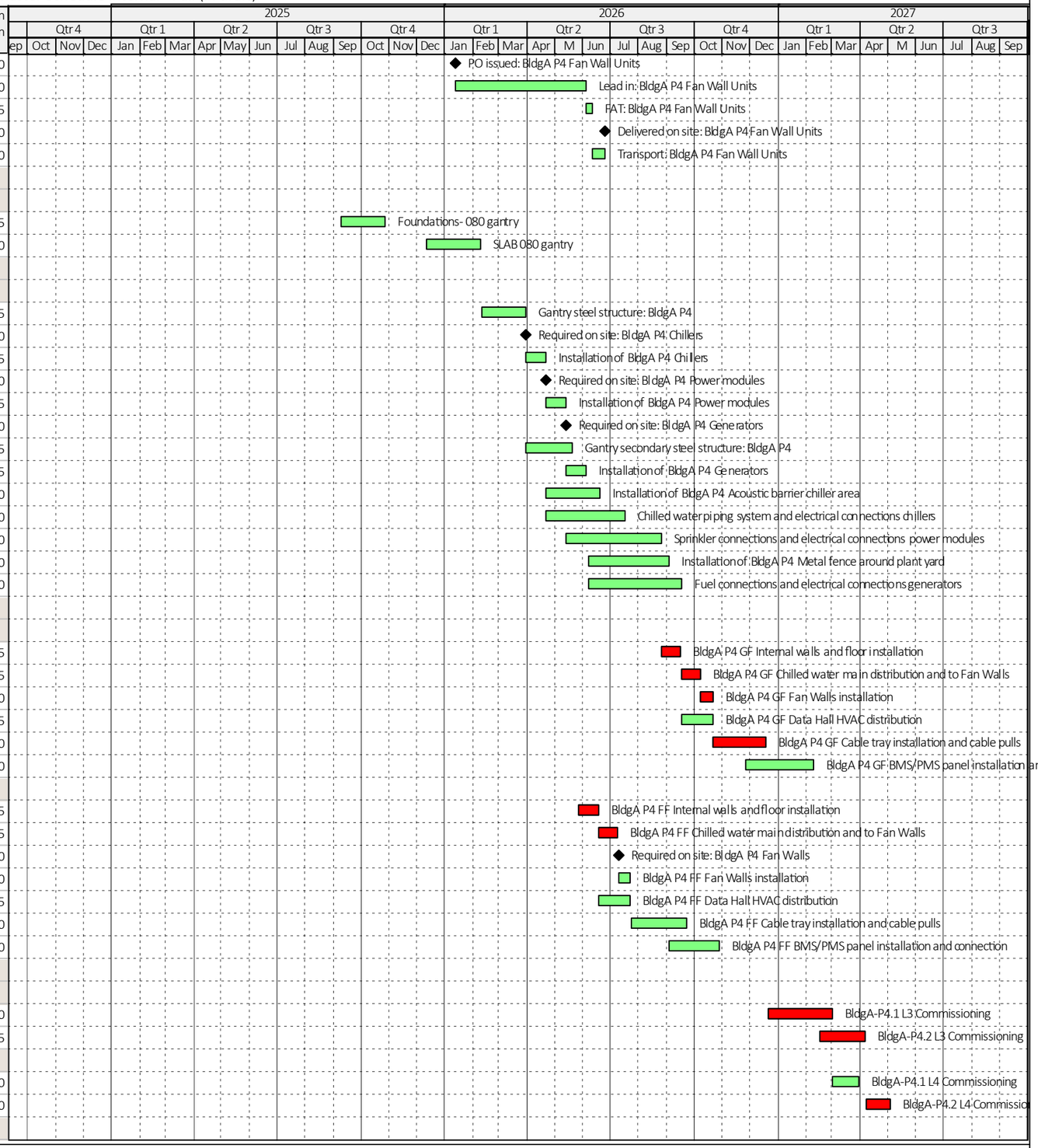
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
PRO-MIL05A	PO issued: BldgA P4 Fan Wall Units	12-Jan-26*		0
PRO-MIL05A	Lead in: BldgA P4 Fan Wall Units	12-Jan-26	04-Jun-26	100
PRO-MIL05A	FAT: BldgA P4 Fan Wall Units	05-Jun-26	11-Jun-26	5
PRO-MIL05A	Delivered on site: BldgA P4 Fan Wall Units		25-Jun-26	0
PRO-MIL05A	Transport: BldgA P4 Fan Wall Units	12-Jun-26	25-Jun-26	10
Delivery				
Shell & Core Construction				
CSA-MIL05A-1340	Foundations- 080 gantry	09-Sep-25	27-Oct-25	35
CSA-MIL05A-1350	SLAB 080 gantry	12-Dec-25	09-Feb-26	30
Data Hall 080 Fit Out & Commissioning				
Plant Yard				
FIT-MIL05A-180	Gantry steel structure: BldgA P4	10-Feb-26	30-Mar-26	35
FIT-MIL05A-112	Required on site: BldgA P4 Chillers	31-Mar-26		0
FIT-MIL05A-146	Installation of BldgA P4 Chillers	31-Mar-26	21-Apr-26	15
FIT-MIL05A-106	Required on site: BldgA P4 Power modules	22-Apr-26		0
FIT-MIL05A-140	Installation of BldgA P4 Power modules	22-Apr-26	13-May-26	15
FIT-MIL05A-108	Required on site: BldgA P4 Generators	14-May-26		0
FIT-MIL05A-188	Gantry secondary steel structure: BldgA P4	31-Mar-26	20-May-26	35
FIT-MIL05A-144	Installation of BldgA P4 Generators	14-May-26	05-Jun-26	15
FIT-MIL05A-148	Installation of BldgA P4 Acoustic barrier chiller area	22-Apr-26	19-Jun-26	40
FIT-MIL05A-204	Chilled water piping system and electrical connections chillers	22-Apr-26	17-Jul-26	60
FIT-MIL05A-101	Sprinkler connections and electrical connections power modules	14-May-26	26-Aug-26	70
FIT-MIL05A-142	Installation of BldgA P4 Metal fence around plant yard	08-Jun-26	03-Sep-26	60
FIT-MIL05A-196	Fuel connections and electrical connections generators	08-Jun-26	17-Sep-26	70
Fit Out				
Ground Floor				
FIT-MIL05A-	BldgA P4 GF Internal walls and floor installation	26-Aug-26	16-Sep-26	15
FIT-MIL05A-	BldgA P4 GF Chilled water main distribution and to Fan Walls	17-Sep-26	07-Oct-26	15
FIT-MIL05A-	BldgA P4 GF Fan Walls installation	08-Oct-26	21-Oct-26	10
FIT-MIL05A-	BldgA P4 GF Data Hall HVAC distribution	17-Sep-26	21-Oct-26	25
FIT-MIL05A-	BldgA P4 GF Cable tray installation and cable pulls	22-Oct-26	18-Dec-26	40
FIT-MIL05A-	BldgA P4 GF BMS/PMS panel installation and connection	26-Nov-26	08-Feb-27	40
First Floor				
FIT-MIL05A-	BldgA P4 FF Internal walls and floor installation	27-May-26	18-Jun-26	15
FIT-MIL05A-	BldgA P4 FF Chilled water main distribution and to Fan Walls	19-Jun-26	09-Jul-26	15
FIT-MIL05A-	Required on site: BldgA P4 Fan Walls	10-Jul-26		0
FIT-MIL05A-	BldgA P4 FF Fan Walls installation	10-Jul-26	23-Jul-26	10
FIT-MIL05A-	BldgA P4 FF Data Hall HVAC distribution	19-Jun-26	23-Jul-26	25
FIT-MIL05A-	BldgA P4 FF Cable tray installation and cable pulls	24-Jul-26	23-Sep-26	40
FIT-MIL05A-	BldgA P4 FF BMS/PMS panel installation and connection	03-Sep-26	28-Oct-26	40
On-Site Commissioning				
Level 3 Cx- Start-Up & Pre-Functional Testing				
CX-MIL05A-1	BldgA-P4.1 L3 Commissioning	21-Dec-26	01-Mar-27	40
CX-MIL05A-1	BldgA-P4.2 L3 Commissioning	16-Feb-27	06-Apr-27	35
Level 4 Cx- Functional Performance Testing				
CX-MIL05A-1	BldgA-P4.1 L4 Commissioning	02-Mar-27	30-Mar-27	20
CX-MIL05A-1	BldgA-P4.2 L4 Commissioning	07-Apr-27	04-May-27	20
Level 5 Cx- Integrated Systems Testing				


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
PO issued: BldgA P4 Fan Wall Units
Lead in: BldgA P4 Fan Wall Units
FAT: BldgA P4 Fan Wall Units
Delivered on site: BldgA P4 Fan Wall Units
Transport: BldgA P4 Fan Wall Units
Foundations- 080 gantry
SLAB 080 gantry
Gantry steel structure: BldgA P4
Required on site: BldgA P4 Chillers
Installation of BldgA P4 Chillers
Required on site: BldgA P4 Power modules
Installation of BldgA P4 Power modules
Required on site: BldgA P4 Generators
Gantry secondary steel structure: BldgA P4
Installation of BldgA P4 Generators
Installation of BldgA P4 Acoustic barrier chiller area
Chilled water piping system and electrical connections chillers
Sprinkler connections and electrical connections power modules
Installation of BldgA P4 Metal fence around plant yard
Fuel connections and electrical connections generators
BldgA P4 GF Internal walls and floor installation
BldgA P4 GF Chilled water main distribution and to Fan Walls
BldgA P4 GF Fan Walls installation
BldgA P4 GF Data Hall HVAC distribution
BldgA P4 GF Cable tray installation and cable pulls
BldgA P4 GF BMS/PMS panel installation and connection
BldgA P4 FF Internal walls and floor installation
BldgA P4 FF Chilled water main distribution and to Fan Walls
Required on site: BldgA P4 Fan Walls
BldgA P4 FF Fan Walls installation
BldgA P4 FF Data Hall HVAC distribution
BldgA P4 FF Cable tray installation and cable pulls
BldgA P4 FF BMS/PMS panel installation and connection
BldgA-P4.1 L3 Commissioning
BldgA-P4.2 L3 Commissioning
BldgA-P4.1 L4 Commissioning
BldgA-P4.2 L4 Commissio

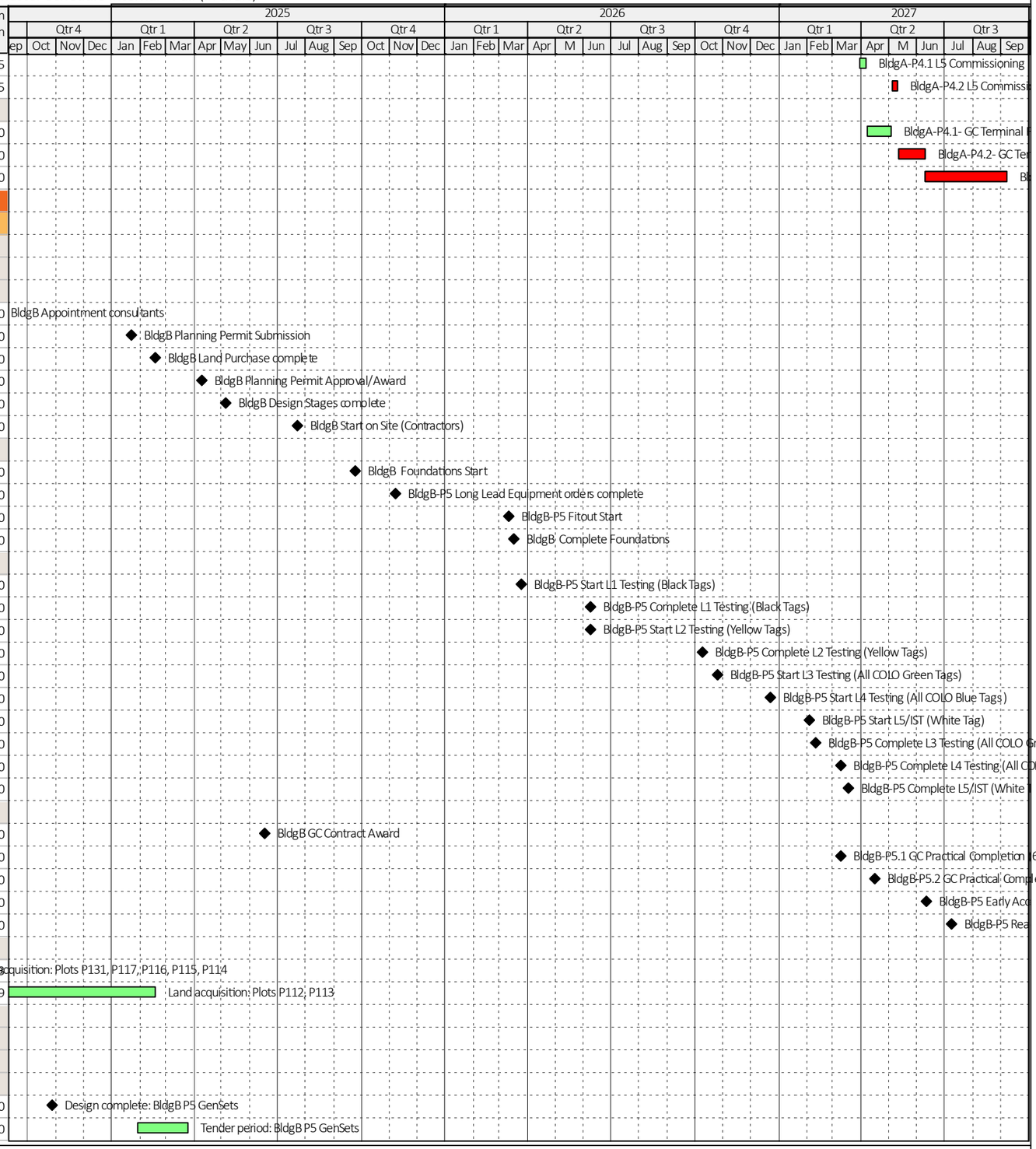
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
CX-MIL05A-1	BldgA-P4.1 L5 Commissioning	31-Mar-27	06-Apr-27	5
CX-MIL05A-1	BldgA-P4.2 L5 Commissioning	05-May-27	11-May-27	5
Level 6 Cx- Hand Over				
TER-MIL05A-	BldgA-P4.1- GC Terminal Float	07-Apr-27	04-May-27	20
TER-MIL05A-	BldgA-P4.2- GC Terminal Float	12-May-27	09-Jun-27	20
TER-MIL05A-	BldgA-P4- STACK Terminal Float	10-Jun-27	07-Sep-27	60
Phase 5- 12MW				
Building B				
Key Milestones				
Landlord				
Site Wide				
MIL05-B-SITE-AF	BldgB Appointment consultants		30-Aug-24	0
MIL05-B-SITE-PL	BldgB Planning Permit Submission	22-Jan-25		0
MIL05-B-SITE-LS	BldgB Land Purchase complete		17-Feb-25	0
MIL05-B-SITE-PL	BldgB Planning Permit Approval/Award		09-Apr-25	0
MIL05-B-SITE-DE	BldgB Design Stages complete		05-May-25	0
MIL05-B-SITE-SC	BldgB Start on Site (Contractors)	23-Jul-25		0
Building				
MIL05-B-SITE-FN	BldgB Foundations Start	25-Sep-25		0
MIL05-A-05-LLE-	BldgB-P5 Long Lead Equipment orders complete		07-Nov-25	0
MIL05-B-05-FIT-	BldgB-P5 Fitout Start	11-Mar-26		0
MIL05-B-SITE-FN	BldgB Complete Foundations		17-Mar-26	0
Commissioning				
MIL05-B-05-L1C	BldgB-P5 Start L1 Testing (Black Tags)	25-Mar-26		0
MIL05-B-05-L1C	BldgB-P5 Complete L1 Testing (Black Tags)		08-Jun-26	0
MIL05-B-05-L2C	BldgB-P5 Start L2 Testing (Yellow Tags)	09-Jun-26		0
MIL05-B-05-L2C	BldgB-P5 Complete L2 Testing (Yellow Tags)		09-Oct-26	0
MIL05-B-05-L3C	BldgB-P5 Start L3 Testing (All COLO Green Tags)	26-Oct-26		0
MIL05-B-05-L4C	BldgB-P5 Start L4 Testing (All COLO Blue Tags)	23-Dec-26		0
MIL05-B-05-L5C	BldgB-P5 Start L5/IST (White Tag)	04-Feb-27		0
MIL05-B-05-L3C	BldgB-P5 Complete L3 Testing (All COLO Green Tags)		10-Feb-27	0
MIL05-B-05-L4C	BldgB-P5 Complete L4 Testing (All COLO Blue Tags)		10-Mar-27	0
MIL05-B-05-L5C	BldgB-P5 Complete L5/IST (White Tag)		17-Mar-27	0
Tenant				
MIL05-B-SITE-GCA-F	BldgB GC Contract Award		17-Jun-25	0
MIL05-B-05.1-PC-F	BldgB-P5.1 GC Practical Completion (6MW)		10-Mar-27	0
MIL05-B-05.2-PC-F	BldgB-P5.2 GC Practical Completion (6MW)		15-Apr-27	0
MIL05-B-05-EAP-F	BldgB-P5 Early Access Provided		11-Jun-27	0
MIL05-A-04-RFS-F	BldgB-P5 Ready for Service (RFS) (12MW)		09-Jul-27*	0
Land Acquisition Activities				
MIL05B-ACQ-1010	Land acquisition: Plots P131, P117, P116, P115, P114	01-Feb-24 A	16-Jul-24 A	114
MIL05B-ACQ-1000	Land acquisition: Plots P112, P113	01-Aug-24 A	17-Feb-25	129
Preconstruction				
Procurement				
Long Lead Equipment				
Generators				
PRO-MIL05B	Design complete: BldgB P5 GenSets	28-Oct-24		0
PRO-MIL05B	Tender period: BldgB P5 GenSets	29-Jan-25	25-Mar-25	40


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
BldgA-P4.1 L5 Commissioning
BldgA-P4.2 L5 Commissi
BldgA-P4.1- GC Terminal
BldgA-P4.2- GC Ter
BldgB Appointment consultants
BldgB Planning Permit Submission
BldgB Land Purchase complete
BldgB Planning Permit Approval/Award
BldgB Design Stages complete
BldgB Start on Site (Contractors)
BldgB Foundations Start
BldgB-P5 Long Lead Equipment orders complete
BldgB-P5 Fitout Start
BldgB Complete Foundations
BldgB-P5 Start L1 Testing (Black Tags)
BldgB-P5 Complete L1 Testing (Black Tags)
BldgB-P5 Start L2 Testing (Yellow Tags)
BldgB-P5 Complete L2 Testing (Yellow Tags)
BldgB-P5 Start L3 Testing (All COLO Green Tags)
BldgB-P5 Start L4 Testing (All COLO Blue Tags)
BldgB-P5 Start L5/IST (White Tag)
BldgB-P5 Complete L3 Testing (All COLO Green Tags)
BldgB-P5 Complete L4 Testing (All COLO Blue Tags
BldgB-P5 Complete L5/IST (White
BldgB GC Contract Award
BldgB-P5.1 GC Practical Completion (6MW)
BldgB-P5.2 GC Practical Completion (6MW
BldgB-P5 Early Acc
BldgB-P5 Rea
Land acquisition: Plots P131, P117, P116, P115, P114
Land acquisition: Plots P112, P113
Design complete: BldgB P5 GenSets
Tender period: BldgB P5 GenSets

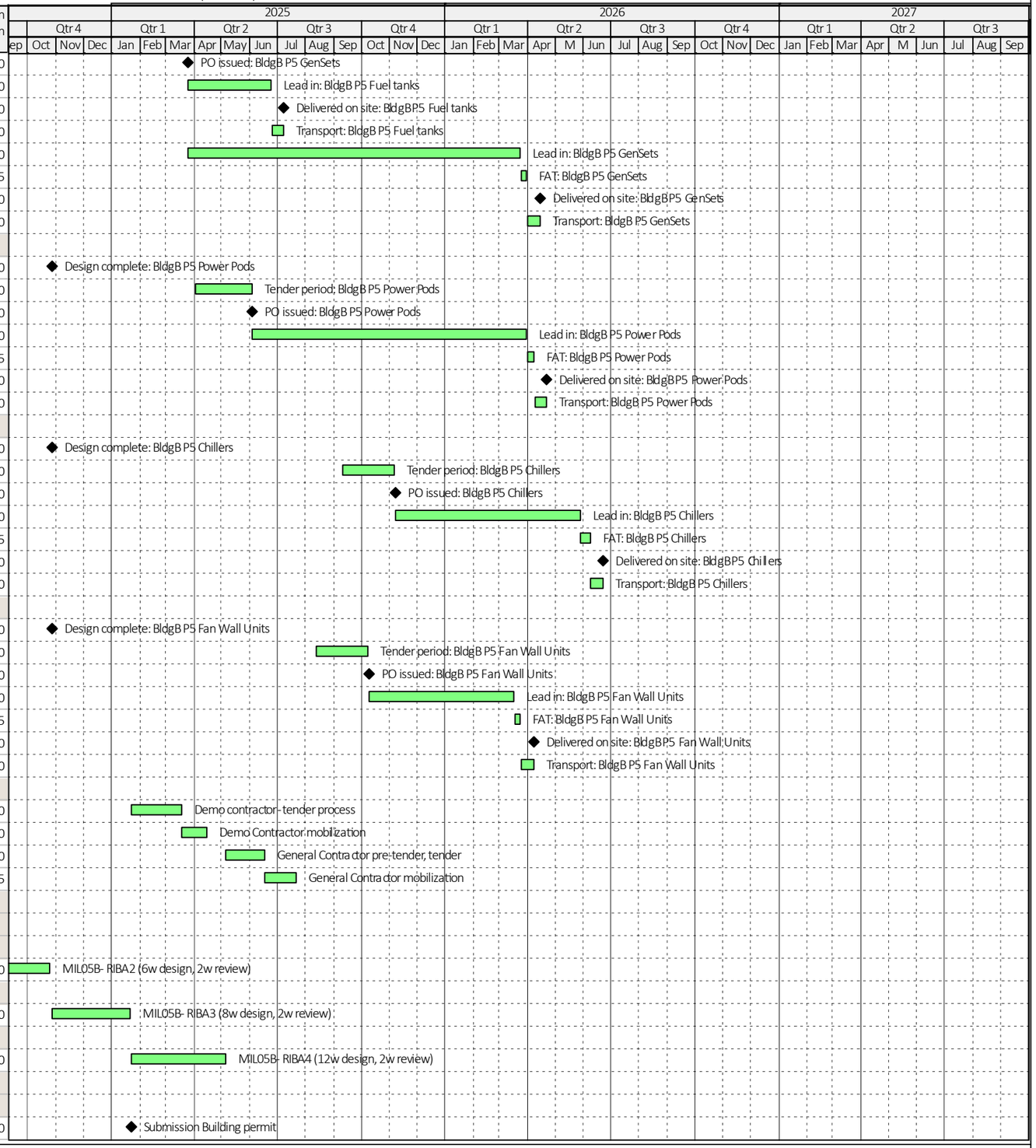
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
PRO-MIL05B	PO issued: BldgB P5 GenSets	26-Mar-25*		0
PRO-MIL05B	Lead in: BldgB P5 Fuel tanks	26-Mar-25	24-Jun-25	60
PRO-MIL05B	Delivered on site: BldgBP5 Fuel tanks		08-Jul-25	0
PRO-MIL05B	Transport: BldgB P5 Fuel tanks	25-Jun-25	08-Jul-25	10
PRO-MIL05B	Lead in: BldgB P5 GenSets	26-Mar-25	24-Mar-26	240
PRO-MIL05B	FAT: BldgB P5 GenSets	25-Mar-26	31-Mar-26	5
PRO-MIL05B	Delivered on site: BldgBP5 GenSets		15-Apr-26	0
PRO-MIL05B	Transport: BldgB P5 GenSets	01-Apr-26	15-Apr-26	10
Power Pods				
PRO-MIL05B	Design complete: BldgB P5 Power Pods	28-Oct-24		0
PRO-MIL05B	Tender period: BldgB P5 Power Pods	02-Apr-25	03-Jun-25	40
PRO-MIL05B	PO issued: BldgB P5 Power Pods	04-Jun-25*		0
PRO-MIL05B	Lead in: BldgB P5 Power Pods	04-Jun-25	31-Mar-26	200
PRO-MIL05B	FAT: BldgB P5 Power Pods	01-Apr-26	08-Apr-26	5
PRO-MIL05B	Delivered on site: BldgBP5 Power Pods		22-Apr-26	0
PRO-MIL05B	Transport: BldgB P5 Power Pods	09-Apr-26	22-Apr-26	10
Chillers				
PRO-MIL05B	Design complete: BldgB P5 Chillers	28-Oct-24		0
PRO-MIL05B	Tender period: BldgB P5 Chillers	11-Sep-25	06-Nov-25	40
PRO-MIL05B	PO issued: BldgB P5 Chillers	07-Nov-25*		0
PRO-MIL05B	Lead in: BldgB P5 Chillers	07-Nov-25	28-May-26	130
PRO-MIL05B	FAT: BldgB P5 Chillers	29-May-26	08-Jun-26	5
PRO-MIL05B	Delivered on site: BldgBP5 Chillers		22-Jun-26	0
PRO-MIL05B	Transport: BldgB P5 Chillers	09-Jun-26	22-Jun-26	10
Fan Wall Units				
PRO-MIL05B	Design complete: BldgB P5 Fan Wall Units	28-Oct-24		0
PRO-MIL05B	Tender period: BldgB P5 Fan Wall Units	13-Aug-25	08-Oct-25	40
PRO-MIL05B	PO issued: BldgB P5 Fan Wall Units	09-Oct-25*		0
PRO-MIL05B	Lead in: BldgB P5 Fan Wall Units	09-Oct-25	17-Mar-26	100
PRO-MIL05B	FAT: BldgB P5 Fan Wall Units	18-Mar-26	24-Mar-26	5
PRO-MIL05B	Delivered on site: BldgBP5 Fan Wall Units		08-Apr-26	0
PRO-MIL05B	Transport: BldgB P5 Fan Wall Units	25-Mar-26	08-Apr-26	10
General Contractor				
PRO-MIL05B-10	Demo contractor - tender process	22-Jan-25	18-Mar-25	40
PRO-MIL05B-10	Demo Contractor mobilization	19-Mar-25	15-Apr-25	20
PRO-MIL05B-11	General Contractor pre-tender, tender	06-May-25	17-Jun-25	30
PRO-MIL05B-11	General Contractor mobilization	18-Jun-25	22-Jul-25	25
Design				
RIBA Stages				
RIBA Stage 2				
DES-MIL05B-	MIL05B- RIBA2 (6w design, 2w review)	02-Sep-24*	25-Oct-24	40
RIBA Stage 3				
DES-MIL05B-	MIL05B- RIBA3 (8w design, 2w review)	28-Oct-24	21-Jan-25	50
RIBA Stage 4				
DES-MIL05B-	MIL05B- RIBA4 (12w design, 2w review)	22-Jan-25	05-May-25	70
Permits				
Building permit				
PER-MIL05B-10	Submission Building permit	22-Jan-25		0


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
ep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
PO issued: BldgB P5 GenSets
Lead in: BldgB P5 Fuel tanks
Delivered on site: BldgBP5 Fuel tanks
Transport: BldgB P5 Fuel tanks
Lead in: BldgB P5 GenSets
FAT: BldgB P5 GenSets
Delivered on site: BldgBP5 GenSets
Transport: BldgB P5 GenSets
Design complete: BldgB P5 Power Pods
Tender period: BldgB P5 Power Pods
PO issued: BldgB P5 Power Pods
Lead in: BldgB P5 Power Pods
FAT: BldgB P5 Power Pods
Delivered on site: BldgBP5 Power Pods
Transport: BldgB P5 Power Pods
Design complete: BldgB P5 Chillers
Tender period: BldgB P5 Chillers
PO issued: BldgB P5 Chillers
Lead in: BldgB P5 Chillers
FAT: BldgB P5 Chillers
Delivered on site: BldgBP5 Chillers
Transport: BldgB P5 Chillers
Design complete: BldgB P5 Fan Wall Units
Tender period: BldgB P5 Fan Wall Units
PO issued: BldgB P5 Fan Wall Units
Lead in: BldgB P5 Fan Wall Units
FAT: BldgB P5 Fan Wall Units
Delivered on site: BldgBP5 Fan Wall Units
Transport: BldgB P5 Fan Wall Units
Demo contractor - tender process
Demo Contractor mobilization
General Contractor pre-tender, tender
General Contractor mobilization
MIL05B- RIBA2 (6w design, 2w review)
MIL05B- RIBA3 (8w design, 2w review)
MIL05B- RIBA4 (12w design, 2w review)
Submission Building permit

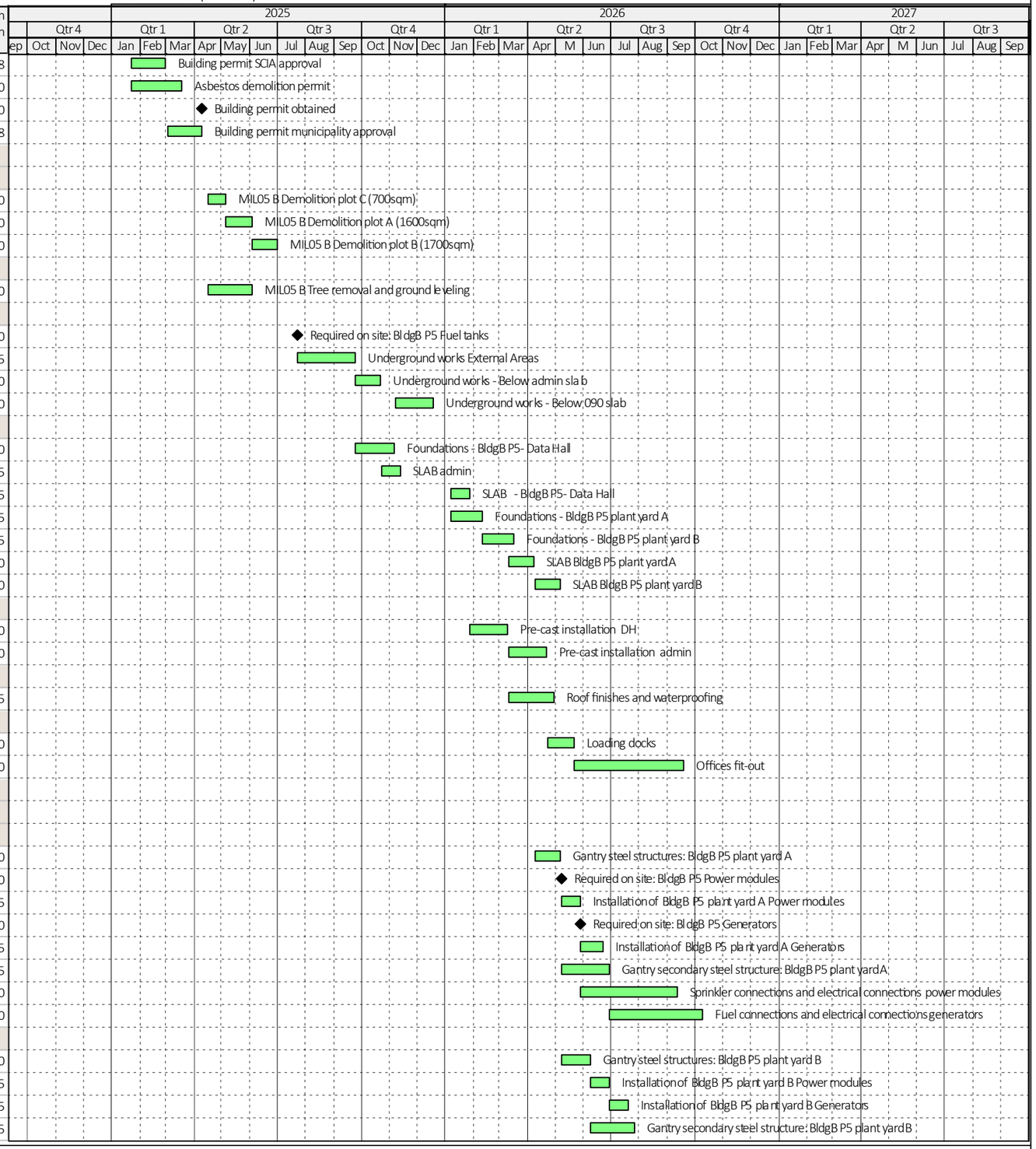
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
PER-MIL05B-103	Building permit SCIA approval	22-Jan-25	28-Feb-25	28
PER-MIL05B-100	Asbestos demolition permit	22-Jan-25	18-Mar-25	40
PER-MIL05B-102	Building permit obtained		09-Apr-25	0
PER-MIL05B-101	Building permit municipality approval	03-Mar-25	09-Apr-25	28
Delivery				
Demolition				
DEM-MIL05B-1020	MIL05 B Demolition plot C (700sqm)	16-Apr-25	05-May-25	10
DEM-MIL05B-1000	MIL05 B Demolition plot A (1600sqm)	06-May-25	03-Jun-25	20
DEM-MIL05B-1010	MIL05 B Demolition plot B (1700sqm)	04-Jun-25	01-Jul-25	20
Site Enabling				
DEM-MIL05B-1030	MIL05 B Tree removal and ground leveling	16-Apr-25	03-Jun-25	30
Shell & Core Construction				
PRO-MIL05B-1280	Required on site: BldgB P5 Fuel tanks	23-Jul-25		0
CSA-MIL05B-1120	Underground works External Areas	23-Jul-25	24-Sep-25	45
CSA-MIL05B-1110	Underground works - Below admin slab	25-Sep-25	22-Oct-25	20
CSA-MIL05B-1100	Underground works - Below 090 slab	07-Nov-25	19-Dec-25	30
Substructure				
CSA-MIL05B-100	Foundations - BldgB P5- Data Hall	25-Sep-25	06-Nov-25	30
CSA-MIL05B-107	SLAB admin	23-Oct-25	13-Nov-25	15
CSA-MIL05B-106	SLAB - BldgB P5- Data Hall	07-Jan-26	27-Jan-26	15
CSA-MIL05B-101	Foundations - BldgB P5 plant yard A	07-Jan-26	10-Feb-26	25
CSA-MIL05B-102	Foundations - BldgB P5 plant yard B	11-Feb-26	17-Mar-26	25
CSA-MIL05B-108	SLAB BldgB P5 plant yard A	11-Mar-26	08-Apr-26	20
CSA-MIL05B-109	SLAB BldgB P5 plant yard B	09-Apr-26	07-May-26	20
Superstructure				
CSA-MIL05B-104	Pre-cast installation DH	28-Jan-26	10-Mar-26	30
CSA-MIL05B-103	Pre-cast installation admin	11-Mar-26	22-Apr-26	30
Envelope				
CSA-MIL05B-105	Roof finishes and waterproofing	11-Mar-26	29-Apr-26	35
Administration Building Fit Out & Commissioning				
FIT-MIL05B-1220	Loading docks	23-Apr-26	21-May-26	20
FIT-MIL05B-1230	Offices fit-out	22-May-26	18-Sep-26	80
Data Hall 090 Fit Out & Commissioning				
Plant Yard				
Plant Yard A				
FIT-MIL05B-1	Gantry steel structures: BldgB P5 plant yard A	09-Apr-26	07-May-26	20
FIT-MIL05B-1	Required on site: BldgB P5 Power modules	08-May-26		0
FIT-MIL05B-1	Installation of BldgB P5 plant yard A Power modules	08-May-26	28-May-26	15
FIT-MIL05B-1	Required on site: BldgB P5 Generators	29-May-26		0
FIT-MIL05B-1	Installation of BldgB P5 plant yard A Generators	29-May-26	22-Jun-26	15
FIT-MIL05B-1	Gantry secondary steel structure: BldgB P5 plant yard A	08-May-26	29-Jun-26	35
FIT-MIL05B-1	Sprinkler connections and electrical connections power modules	29-May-26	11-Sep-26	70
FIT-MIL05B-1	Fuel connections and electrical connections generators	30-Jun-26	09-Oct-26	70
Plant Yard B				
FIT-MIL05B-1	Gantry steel structures: BldgB P5 plant yard B	08-May-26	08-Jun-26	20
FIT-MIL05B-1	Installation of BldgB P5 plant yard B Power modules	09-Jun-26	29-Jun-26	15
FIT-MIL05B-1	Installation of BldgB P5 plant yard B Generators	30-Jun-26	20-Jul-26	15
FIT-MIL05B-1	Gantry secondary steel structure: BldgB P5 plant yard B	09-Jun-26	27-Jul-26	35


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
ep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
Building permit SCIA approval
Asbestos demolition permit
Building permit obtained
Building permit municipality approval
MIL05 B Demolition plot C (700sqm)
MIL05 B Demolition plot A (1600sqm)
MIL05 B Demolition plot B (1700sqm)
MIL05 B Tree removal and ground leveling
Required on site: BldgB P5 Fuel tanks
Underground works External Areas
Underground works - Below admin slab
Underground works - Below 090 slab
Foundations - BldgB P5- Data Hall
SLAB admin
SLAB - BldgB P5- Data Hall
Foundations - BldgB P5 plant yard A
Foundations - BldgB P5 plant yard B
SLAB BldgB P5 plant yard A
SLAB BldgB P5 plant yard B
Pre-cast installation DH
Pre-cast installation admin
Roof finishes and waterproofing
Loading docks
Offices fit-out
Gantry steel structures: BldgB P5 plant yard A
Required on site: BldgB P5 Power modules
Installation of BldgB P5 plant yard A Power modules
Required on site: BldgB P5 Generators
Installation of BldgB P5 plant yard A Generators
Gantry secondary steel structure: BldgB P5 plant yard A
Sprinkler connections and electrical connections power modules
Fuel connections and electrical connections generators
Gantry steel structures: BldgB P5 plant yard B
Installation of BldgB P5 plant yard B Power modules
Installation of BldgB P5 plant yard B Generators
Gantry secondary steel structure: BldgB P5 plant yard B

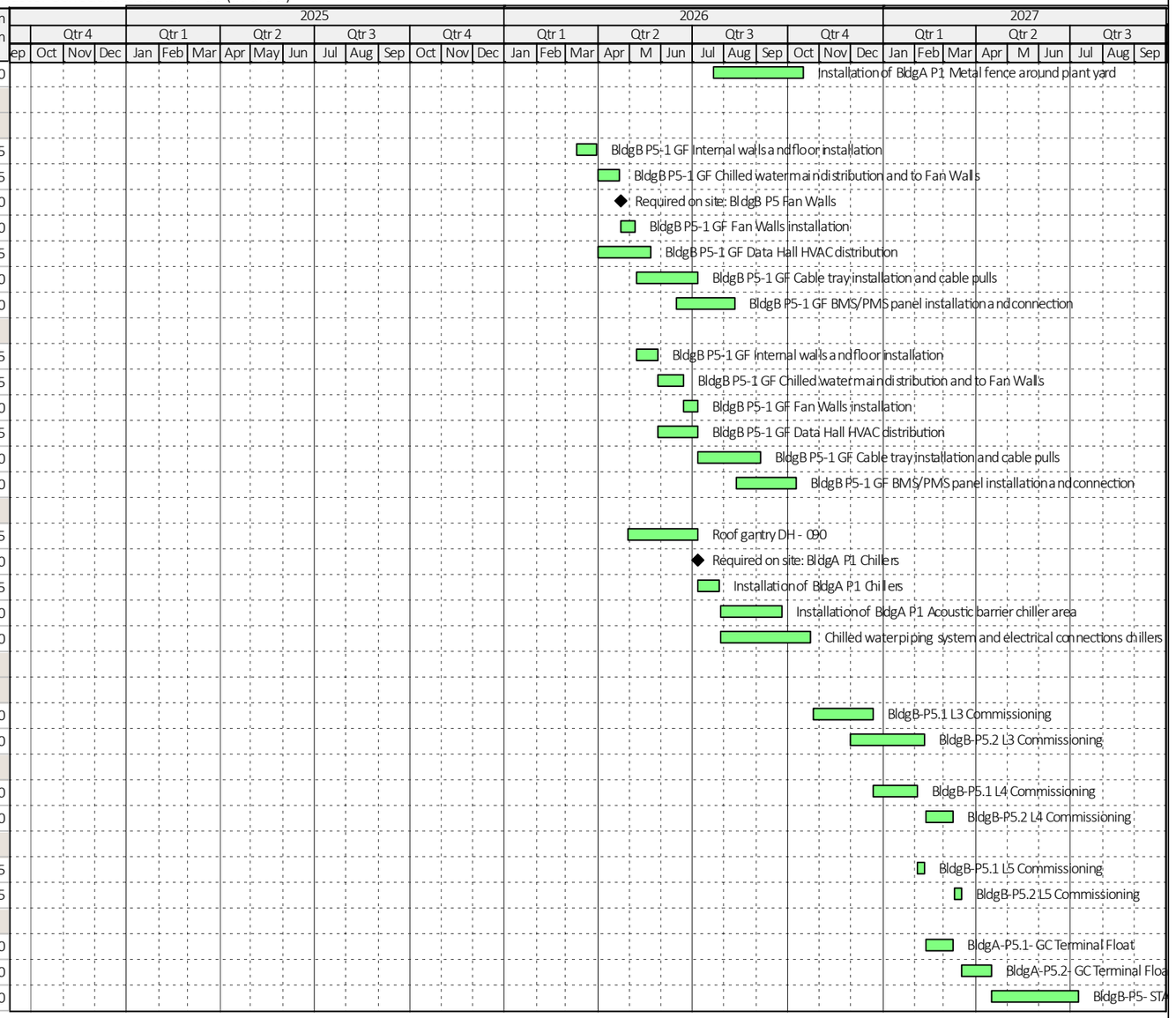
Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24

MIL 05 IMS

Integrated Master Schedule internal - Full (in draft)

Activity ID	Activity Name	Start	Finish	At Completion Duration
FIT-MIL05B-1	Installation of BldgA P1 Metal fence around plant yard	21-Jul-26	16-Oct-26	60
Fit Out				
Ground Floor Data Hall 1				
FIT-MIL05B-1	BldgB P5-1 GF Internal walls and floor installation	11-Mar-26	31-Mar-26	15
FIT-MIL05B-1	BldgB P5-1 GF Chilled water main distribution and to Fan Walls	01-Apr-26	22-Apr-26	15
FIT-MIL05B-1	Required on site: BldgB P5 Fan Walls	23-Apr-26		0
FIT-MIL05B-1	BldgB P5-1 GF Fan Walls installation	23-Apr-26	07-May-26	10
FIT-MIL05B-1	BldgB P5-1 GF Data Hall HVAC distribution	01-Apr-26	21-May-26	35
FIT-MIL05B-1	BldgB P5-1 GF Cable tray installation and cable pulls	08-May-26	06-Jul-26	40
FIT-MIL05B-1	BldgB P5-1 GF BMS/PMS panel installation and connection	16-Jun-26	11-Aug-26	40
Ground Floor Data Hall 2				
FIT-MIL05B-2	BldgB P5-1 GF Internal walls and floor installation	08-May-26	28-May-26	15
FIT-MIL05B-1	BldgB P5-1 GF Chilled water main distribution and to Fan Walls	29-May-26	22-Jun-26	15
FIT-MIL05B-1	BldgB P5-1 GF Fan Walls installation	23-Jun-26	06-Jul-26	10
FIT-MIL05B-1	BldgB P5-1 GF Data Hall HVAC distribution	29-May-26	06-Jul-26	25
FIT-MIL05B-1	BldgB P5-1 GF Cable tray installation and cable pulls	07-Jul-26	04-Sep-26	40
FIT-MIL05B-1	BldgB P5-1 GF BMS/PMS panel installation and connection	12-Aug-26	09-Oct-26	40
Roof				
FIT-MIL05B-2	Roof gantry DH - 090	30-Apr-26	06-Jul-26	45
FIT-MIL05B-2	Required on site: BldgA P1 Chillers	07-Jul-26		0
FIT-MIL05B-2	Installation of BldgA P1 Chillers	07-Jul-26	27-Jul-26	15
FIT-MIL05B-2	Installation of BldgA P1 Acoustic barrier chiller area	28-Jul-26	25-Sep-26	40
FIT-MIL05B-2	Chilled water piping system and electrical connections chillers	28-Jul-26	23-Oct-26	60
On-Site Commissioning				
Level 3 Cx- Start-Up & Pre-Functional Testing				
CX-MIL05B-1	BldgB-P5.1 L3 Commissioning	26-Oct-26	22-Dec-26	40
CX-MIL05B-1	BldgB-P5.2 L3 Commissioning	30-Nov-26	10-Feb-27	40
Level 4 Cx- Functional Performance Testing				
CX-MIL05B-1	BldgB-P5.1 L4 Commissioning	23-Dec-26	03-Feb-27	20
CX-MIL05B-1	BldgB-P5.2 L4 Commissioning	11-Feb-27	10-Mar-27	20
Level 5 Cx- Integrated Systems Testing				
CX-MIL05B-1	BldgB-P5.1 L5 Commissioning	04-Feb-27	10-Feb-27	5
CX-MIL05B-1	BldgB-P5.2 L5 Commissioning	11-Mar-27	17-Mar-27	5
Level 6 Cx- Hand Over				
TER-MIL05A-	BldgA-P5.1- GC Terminal Float	11-Feb-27	10-Mar-27	20
TER-MIL05A-	BldgA-P5.2- GC Terminal Float	18-Mar-27	15-Apr-27	20
TER-MIL05B-	BldgB-P5- STACK Terminal Float	16-Apr-27	09-Jul-27	60


2025
2026
2027
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Qtr 4
Qtr 1
Qtr 2
Qtr 3
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr M Jun Jul Aug Sep
Installation of BldgA P1 Metal fence around plant yard
BldgB P5-1 GF Internal walls and floor installation
BldgB P5-1 GF Chilled water main distribution and to Fan Walls
Required on site: BldgB P5 Fan Walls
BldgB P5-1 GF Fan Walls installation
BldgB P5-1 GF Data Hall HVAC distribution
BldgB P5-1 GF Cable tray installation and cable pulls
BldgB P5-1 GF BMS/PMS panel installation and connection
BldgB P5-1 GF Internal walls and floor installation
BldgB P5-1 GF Chilled water main distribution and to Fan Walls
BldgB P5-1 GF Fan Walls installation
BldgB P5-1 GF Data Hall HVAC distribution
BldgB P5-1 GF Cable tray installation and cable pulls
BldgB P5-1 GF BMS/PMS panel installation and connection
Roof gantry DH - 090
Required on site: BldgA P1 Chillers
Installation of BldgA P1 Chillers
Installation of BldgA P1 Acoustic barrier chiller area
Chilled water piping system and electrical connections chillers
BldgB-P5.1 L3 Commissioning
BldgB-P5.2 L3 Commissioning
BldgB-P5.1 L4 Commissioning
BldgB-P5.2 L4 Commissioning
BldgB-P5.1 L5 Commissioning
BldgB-P5.2 L5 Commissioning
BldgA-P5.1- GC Terminal Float
BldgA-P5.2- GC Terminal Floa
BldgB-P5- STA

Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Data Date: 30-Aug-24
Baseline: NA
Prepared by: R. van Arkel on 09-Sep-24